

=> fil reg

FILE 'REGISTRY' ENTERED AT 11:09:44 ON 04 MAY 2005
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=> d his ful

FILE 'HCAPLUS' ENTERED AT 09:47:04 ON 04 MAY 2005

L1 3759 SEA ABB=ON PLU=ON HSU C?/AU
L2 106 SEA ABB=ON PLU=ON MACPHERSON C?/AU
L3 12 SEA ABB=ON PLU=ON SKULASON H?/AU
L4 2 SEA ABB=ON PLU=ON L1 AND L2 AND L3
D SCAN TI
L5 2 SEA ABB=ON PLU=ON L4 AND CONDUCT?
L6 2 SEA ABB=ON PLU=ON L4 AND ELECTRONIC?
D SCAN
SEL RN

FILE 'REGISTRY' ENTERED AT 09:52:20 ON 04 MAY 2005

L7 3 SEA ABB=ON PLU=ON (126213-51-2/BI OR 155090-83-8/BI
L8 STR
L9 STR
L10 SCR 2043
L11 50 SEA SSS SAM (L8 OR L9) AND L10
D QUE STAT L11
L12 STR
L13 69718 SEA SSS FUL (L8 OR L9) AND L10
SAV L13 COS114/A
L14 50 SEA SUB=L13 SSS SAM L12
L15 29888 SEA SUB=L13 SSS FUL L12

FILE 'HCAPLUS' ENTERED AT 10:34:10 ON 04 MAY 2005

L16 21984 SEA ABB=ON PLU=ON L15
L17 6485 SEA ABB=ON PLU=ON L16 AND (GLYCOL? OR GLYCOL(A) ETHER?
OR ALCOHOL? OR ALCOHOL(A) ETHER? OR KETONE? OR
NITRILE? OR SULFOXIDE? OR AMIDE?)
L18 1158 SEA ABB=ON PLU=ON L16 (L) (GLYCOL? OR GLYCOL(A) ETHER?
OR ALCOHOL? OR ALCOHOL(A) ETHER? OR KETONE? OR NITRILE?
OR SULFOXIDE? OR AMIDE?)
L19 0 SEA ABB=ON PLU=ON L18 AND L6
L20 61 SEA ABB=ON PLU=ON L18 (L) POF?/RL
L21 4 SEA ABB=ON PLU=ON L20 AND ELECTRIC?/SC, SX
D FHITSTR
L22 971 SEA ABB=ON PLU=ON L16 (L) POF?/RL
L23 1 SEA ABB=ON PLU=ON L22 AND L6
L24 108 SEA ABB=ON PLU=ON L22 AND ELECTRIC?/SC, SX
L25 38 SEA ABB=ON PLU=ON L24 AND (GLYCOL? OR GLYCOL(A) ETHER?
OR ALCOHOL? OR ALCOHOL(A) ETHER? OR KETONE? OR
NITRILE? OR SULFOXIDE? OR AMIDE?)
D FHITSTR
D FHITSTR 2-3
L26 52 SEA ABB=ON PLU=ON L18 (L) ((SULFONIC? OR CARBOXYLIC?
OR ACRYLIC? OR PHOSPHORIC? OR PHOSPHONIC?) (A) ACID?)
L27 5 SEA ABB=ON PLU=ON L26 AND POF?/RL
L28 2 SEA ABB=ON PLU=ON L26 AND ELECTRIC?/SC, SX
D L26 FHITSTR
L29 52 SEA ABB=ON PLU=ON L26 NOT L25
L30 3 SEA ABB=ON PLU=ON L29 AND CONDUCT?
L31 14 SEA ABB=ON PLU=ON L29 AND COMPOSITION?

D FHITSTR
D FHITSTR 2-3
L32 55 SEA ABB=ON PLU=ON L25 OR L27 OR L28 OR L30 OR L31
D FHITSTR
D FHITSTR 2-5

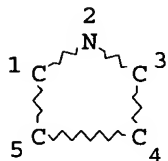
FILE 'REGISTRY' ENTERED AT 11:09:44 ON 04 MAY 2005

FILE HCAPLUS

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=> d que l16

L8 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

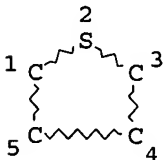
GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 5

STEREO ATTRIBUTES: NONE

L9 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

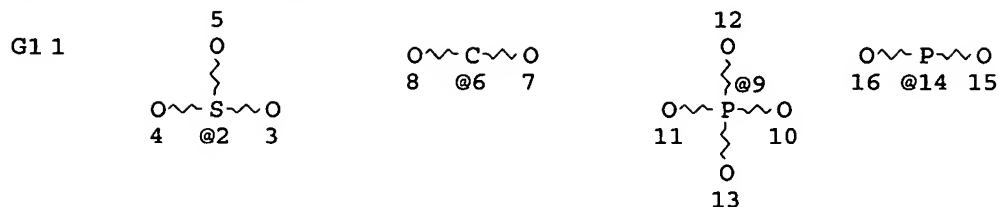
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 5

STEREO ATTRIBUTES: NONE

L10 SCR 2043

L12 STR



VAR G1=2/6/9/14
 NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE

L13 69718 SEA FILE=REGISTRY SSS FUL (L8 OR L9) AND L10
 L15 29888 SEA FILE=REGISTRY SUB=L13 SSS FUL L12
 L16 21984 SEA FILE=HCAPLUS ABB=ON PLU=ON L15

=> fil hcap

FILE 'HCAPLUS' ENTERED AT 11:10:01 ON 04 MAY 2005
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=> d l32 1-55 ibib abs hitstr hitind

L32 ANSWER 1 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:259702 HCAPLUS
 DOCUMENT NUMBER: 142:317614
 TITLE: Acrylate resin **composition** for optical applications
 INVENTOR(S): Kawamura, Akira; Takeko, Ryu; Iwata, Tomo
 PATENT ASSIGNEE(S): Sumitomo Chemical Company, Limited, Japan
 SOURCE: U.S. Pat. Appl. Publ., 13 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-----------|
| US 2005065252 | A1 | 20050324 | US 2004-934374 | 2004 0907 |
| PRIORITY APPLN. INFO.: | | | JP 2003-317918 | A |
| | | | JP 2004-135492 | A |

2004

0430

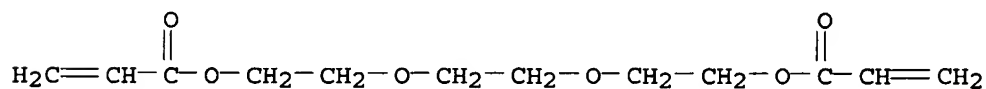
- AB An acrylic resin **composition** comprises the following acrylic resins (1) and (2): acrylic resin (1): an acrylic resin containing a structural unit derived from a monomer (a) (structural unit (a)), a structural unit derived from a monomer (b) (structural unit (b)) and a structural unit derived from a monomer (c) (structural unit (c)) and containing the structural unit (c) in an amount of 0.05 to 5 parts based on 100 parts of the acrylic resin (1); acrylic resin (2): a straight chain acrylic resin based on $H_2C:CR_1CO_2R_2$ as the main component; (wherein, R_1 represents a hydrogen atom or Me group, R_2 represents an alkyl group having 1 to 14 carbon atoms or an aralkyl group having 1 to 14 carbon atoms, and a hydrogen atom in the alkyl group R_2 or a hydrogen atom in the aralkyl group R_2 may be substituted with an alkoxy group having 1 to 10 carbon atoms.), (b): a monomer containing an olefinic double bond in the mol. and at least one 5- or more-membered heterocyclic group in the mol., (c): a monomer containing at least two olefinic double bonds in the mol. A **composition** contained a blend of Bu acrylate-tripropylene glycol diacrylate-N-vinyl-2-pyrrolidone copolymer and Bu acrylate-4-hydroxybutyl acrylate copolymer.
- IT 848192-39-2P, Acrylic acid-butyl acrylate-tripropylene glycol diacrylate-N-vinyl-2-pyrrolidone copolymer
(acrylate resin **composition** for optical applications)
- RN 848192-39-2 HCAPLUS
- CN 2-Propenoic acid, polymer with butyl 2-propenoate, 1-ethenyl-2-pyrrolidinone and (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] di-2-propenoate (9CI)
(CA INDEX NAME)

CM 1

CRN 42978-66-5

CMF C15 H24 O6

CCI IDS

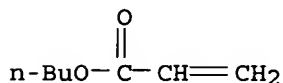


3 (D1-Me)

CM 2

CRN 141-32-2

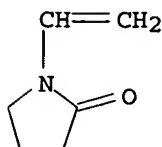
CMF C7 H12 O2



CM 3

CRN 88-12-0

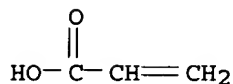
CMF C6 H9 N O



CM 4

CRN 79-10-7

CMF C3 H4 O2



IC ICM C08L051-00

ICS C08K005-24

INCL 524261000; 525203000

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 73

IT Adhesives

(acrylate resin **composition** for optical applications)

IT Laminated plastics, uses

Polymer blends

(acrylate resin **composition** for optical applications)

IT Optical films

(laminated; acrylate resin **composition** for optical applications)

IT 25085-42-1P, Butyl acrylate-4-hydroxybutyl acrylate copolymer

133269-13-3P 848192-36-9P, Butyl acrylate-tripropylene glycol

diacrylate-N-vinyl-2-pyrrolidone copolymer 848192-37-0P

848192-38-1P, Butyl acrylate-tetrahydrofurfuryl

acrylate-tripropylene glycol diacrylate copolymer

848192-39-2P, Acrylic acid-butyl

acrylate-tripropylene glycol diacrylate-N-vinyl-2-

pyrrolidone copolymer 848192-40-5P, Butyl acrylate-isobornyl

acrylate-isobutyl methacrylate-tripropylene glycol

diacrylate-vinylcaprolactam copolymer 848192-41-6P, Butyl

acrylate-isobornyl acrylate-isobutyl acrylate-tripropylene glycol

diacrylate-vinylcaprolactam copolymer 848192-42-7P, Butyl

acrylate-isobornyl acrylate-methyl methacrylate-tripropylene

glycol diacrylate-N-vinyl-2-pyrrolidone copolymer 848192-43-8P,

Acryloylmorpholine-butyl acrylate-isobornyl acrylate-methyl

methacrylate-tripropylene glycol diacrylate copolymer

848192-44-9P, Butyl acrylate-4-hydroxybutyl acrylate-N-

vinylpyrrolidone copolymer

(acrylate resin **composition** for optical applications)

L32 ANSWER 2 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:135584 HCAPLUS
DOCUMENT NUMBER: 142:231516
TITLE: Photosensitive polymer compositions for
manufacture of transparent films of laminates
for electronic parts
INVENTOR(S): Osaku, Yumi
PATENT ASSIGNEE(S): Nippon Zeon Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|--------------|
| ----- | ---- | ----- | ----- | |
| JP 2005041172 | A2 | 20050217 | JP 2003-279529 | 2003 0725 |

PRIORITY APPLN. INFO.: JP 2003-279529
2003
0725

AB The laminates, useful for electronic parts of display devices, comprise transparent substrates (e.g., ITO, glass) and transparent polymer films (preferably prepared from photosensitive polymer compns. containing cycloolefin polymers and quinonediazide sulfonate ester sensitizers) with peeling strength from the substrates (determined by surface and interfacial cutting anal. system; SAICAS) ≥ 0.05 kN/m. The laminates show high transparency after moisture treatment.

IT 840501-95-3DP, hydrogenated
(crosslinked; photosensitive polymer compns. for manufacture of transparent films of laminates for electronic parts)

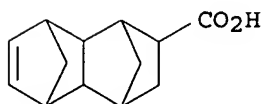
RN 840501-95-3 HCAPLUS

CN 1,4:5,8-Dimethanonaphthalene-2-carboxylic acid,
1,2,3,4,4a,5,8,8a-octahydro-, polymer with 1-hexene and
3a,4,7,7a-tetrahydro-2-phenyl-4,7-methano-1H-isoindole-1,3(2H)-
dione (9CI) (CA INDEX NAME)

CM 1

CRN 46382-54-1

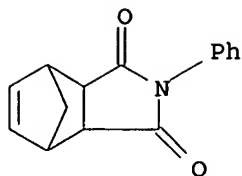
CMF C13 H16 O2



CM 2

CRN 26234-46-8

CMF C15 H13 N O2



CM 3

CRN 592-41-6

CMF C6 H12

H₂C=CH-Bu-n

IC ICM B32B027-00

ICS G02F001-1333; G03F007-004; G03F007-033

CC 76-14 (Electric Phenomena)

Section cross-reference(s): 38, 74

IT 840501-95-3DP, hydrogenated

(crosslinked; photosensitive polymer compns. for manufacture of transparent films of laminates for electronic parts)

IT 872-50-4, N-Methylpyrrolidone, uses 1002-67-1, Diethylene

glycol ethyl methyl ether 98516-30-4, Propylene

glycol monoethylether acetate

(solvent; photosensitive polymer compns. for manufacture of transparent films of laminates for electronic parts)

L32 ANSWER 3 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:98059 HCAPLUS

DOCUMENT NUMBER: 142:157942

TITLE: Actinic ray-curable **compositions**
with good flexibility, solvent resistance, and
adhesiveness to untreated plastics

INVENTOR(S): Chosa, Junichi; Fukada, Akihiko

PATENT ASSIGNEE(S): Nippon Shokubai Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 39 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|--------------|
| JP 2005029774 | A2 | 20050203 | JP 2004-50309 | 2004 0225 |

PRIORITY APPLN. INFO.:

JP 2003-175263

A

2004
0225
2003
0619

AB The **compns.**, useful for inks, coatings, etc., contain N-vinylamide-alkyl (meth)acrylate polymers modified to have actinic ray-curable double bonds. The **compns.** may contain actinic ray-curable mono- or polyfunctional monomers.

Thus, n-Bu acrylate-glycidyl methacrylate-N-vinylpyrrolidone copolymer methacrylate was mixed with colorant and tetraethylene glycol diacrylate to give a paint, which was applied on a PET substrate and UV cured to give a coating layer, showing the mentioned properties.

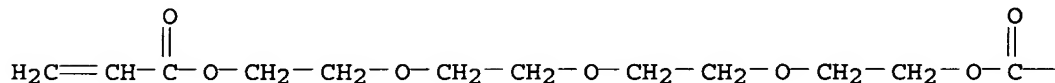
- IT 828267-19-2P, **Acrylic acid-n-butyl**
acrylate-N-vinylpyrrolidone copolymer glycidyl methacrylate ester,
polymer with tetraethylene glycol diacrylate
828267-20-5P, **Acrylic acid-n-butyl**
acrylate-N-vinylpyrrolidone copolymer glycidyl methacrylate ester,
polymer with ethoxydiethylene glycol acrylate and
triethylene glycol diacrylate 828267-21-6P,
Acrylic acid-n-butyl acrylate-N-vinylpyrrolidone
copolymer glycidyl methacrylate ester, polymer with
methoxytriethylene glycol acrylate and triethylene
glycol diacrylate
(actinic ray-curable compns. useful for paints and
inks with good flexibility, solvent resistance, and
adhesiveness to untreated plastics)
- RN 828267-19-2 HCAPLUS
- CN 2-Propenoic acid, polymer with butyl 2-propenoate and
1-ethenyl-2-pyrrolidinone, 2-hydroxy-3-[(2-methyl-1-oxo-2-
propenyl)oxy]propyl ester, polymer with oxybis(2,1-ethanediyl-
oxy-2,1-ethanediyl) di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

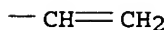
CRN 17831-71-9

CMF C14 H22 O7

PAGE 1-A



PAGE 1-B



CM 2

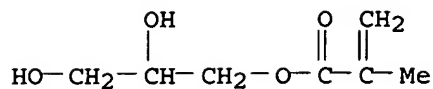
CRN 828267-18-1

CMF C7 H12 O4 . x (C7 H12 O2 . C6 H9 N O . C3 H4 O2)x

CM 3

CRN 5919-74-4

CMF C7 H12 O4



CM 4

CRN 40192-69-6

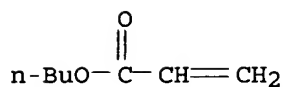
CMF (C7 H12 O2 . C6 H9 N O . C3 H4 O2)x

CCI PMS

CM 5

CRN 141-32-2

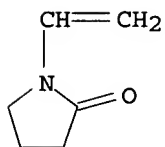
CMF C7 H12 O2



CM 6

CRN 88-12-0

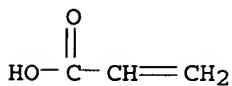
CMF C6 H9 N O



CM 7

CRN 79-10-7

CMF C3 H4 O2



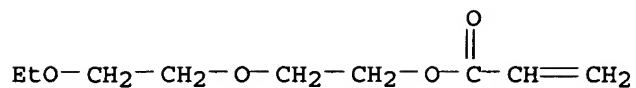
RN 828267-20-5 HCAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate and 1-ethenyl-2-pyrrolidinone, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with 1,2-ethanediylbis(oxy-2,1-ethanediyl) di-2-propenoate and 2-(2-ethoxyethoxy)ethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 7328-17-8

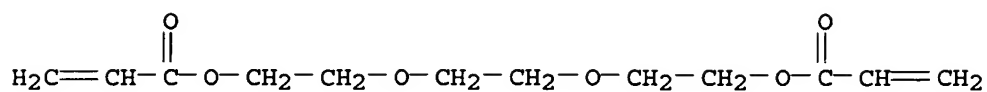
CMF C9 H16 O4



CM 2

CRN 1680-21-3

CMF C12 H18 O6



CM 3

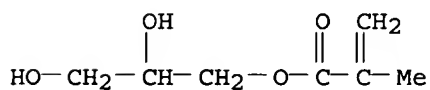
CRN 828267-18-1

CMF C7 H12 O4 . x (C7 H12 O2 . C6 H9 N O . C3 H4 O2)x

CM 4

CRN 5919-74-4

CMF C7 H12 O4



CM 5

CRN 40192-69-6

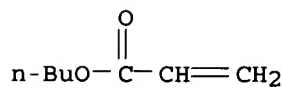
CMF (C7 H12 O2 . C6 H9 N O . C3 H4 O2)x

CCI PMS

CM 6

CRN 141-32-2

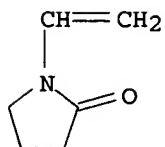
CMF C7 H12 O2



CM 7

CRN 88-12-0

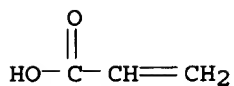
CMF C6 H9 N O



CM 8

CRN 79-10-7

CMF C3 H4 O2



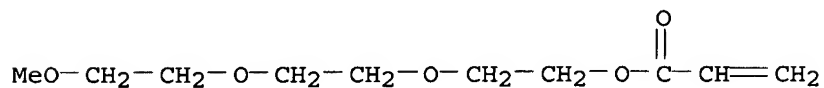
RN 828267-21-6 HCAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate and 1-ethenyl-2-pyrrolidinone, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with 1,2-ethanediylbis(oxy-2,1-ethanediyl) di-2-propenoate and 2-[2-(2-methoxyethoxy)ethoxy]ethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 48067-72-7

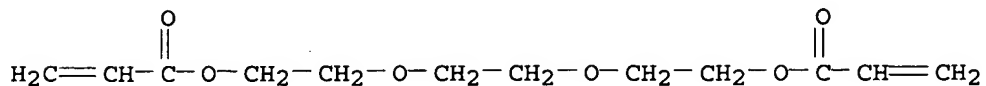
CMF C10 H18 O5



CM 2

CRN 1680-21-3

CMF C12 H18 O6



CM 3

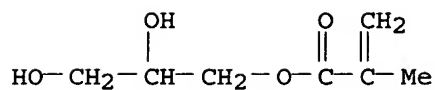
CRN 828267-18-1

CMF C7 H12 O4 . x (C7 H12 O2 . C6 H9 N O . C3 H4 O2)x

CM 4

CRN 5919-74-4

CMF C7 H12 O4



CM 5

CRN 40192-69-6

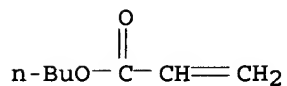
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CCI PMS

CM 6

CRN 141-32-2

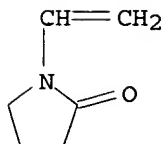
CMF C7 H12 O2



CM 7

CRN 88-12-0

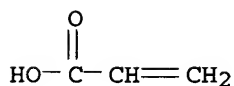
CMF C6 H9 N O



CM 8

CRN 79-10-7

CMF C3 H4 O2



IC ICM C08F290-14

ICS C08F008-14; C08G059-16; C09D004-00; C09D133-00; C09D139-06;
C09D163-10

CC 42-7 (Coatings, Inks, and Related Products)

IT Paints

(UV-curable, solvent-resistant, flexible; actinic ray-curable
compns. useful for paints and inks with good
flexibility, solvent resistance, and adhesiveness to untreated

- plastics)
- IT Polyoxyalkylenes, uses
(acrylic; actinic ray-curable **compns.** useful for
paints and inks with good flexibility, solvent resistance, and
adhesiveness to untreated plastics)
- IT Inks
(photocurable, solvent-resistant, flexible; actinic ray-curable
compns. useful for paints and inks with good
flexibility, solvent resistance, and adhesiveness to untreated
plastics)
- IT 88-12-ODP, polymer with 2-hydroxyethyl acrylate succinate and Bu
acrylate, ester with glycidyl methacrylate, polymer with other
acrylates 106-91-2DP, Glycidyl methacrylate, ester with Bu
acrylate-2-hydroxyethyl acrylate succinate-N-vinylpyrrolidone
copolymer, polymer with other acrylates 108-30-5DP, Succinic
anhydride, ester with 2-hydroxyethyl acrylate, polymer with
N-vinyl pyrrolidone and Bu acrylate, ester with glycidyl
methacrylate, polymer with other acrylates 141-32-2DP, polymer
with 2-hydroxyethyl acrylate succinate and N-vinylpyrrolidone,
ester with glycidyl methacrylate, polymer with other acrylates
818-61-1DP, 2-Hydroxyethyl acrylate, succinate, polymer with
N-vinyl pyrrolidone and Bu acrylate, ester with glycidyl
methacrylate, polymer with other acrylates 15625-89-5DP, polymer
with Bu acrylate-2-hydroxyethyl acrylate succinate-N-
vinylpyrrolidone copolymer glycidyl methacrylate ester and other
acrylates 48145-04-6DP, Phenoxyethyl acrylate, polymer with Bu
acrylate-2-hydroxyethyl acrylate succinate-N-vinylpyrrolidone
copolymer glycidyl methacrylate ester and other acrylates
61722-28-9DP, Propoxylated bisphenol A diacrylate, polymer with Bu
acrylate-2-hydroxyethyl acrylate succinate-N-vinylpyrrolidone
copolymer glycidyl methacrylate ester and other acrylates
84170-74-1DP, Propoxylated neopentyl glycol diacrylate, polymer
with Bu acrylate-2-hydroxyethyl acrylate succinate-N-
vinylpyrrolidone copolymer glycidyl methacrylate ester and other
acrylates 828267-15-8P, n-Butyl acrylate-glydicyl
methacrylate-N-vinylpyrrolidone copolymer methacrylate, polymer
with tetraethylene glycol diacrylate 828267-16-9P, n-Butyl
acrylate-glydicyl methacrylate-N-vinylpyrrolidone copolymer
methacrylate, polymer with ethoxydiethylene glycol acrylate and
triethylene glycol diacrylate 828267-17-0P, n-Butyl
acrylate-glydicyl methacrylate-N-vinylpyrrolidone copolymer
methacrylate, polymer with methoxytriethylene glycol acrylate and
triethylene glycol diacrylate 828267-19-2P,
Acrylic acid-n-butyl acrylate-N-vinylpyrrolidone
copolymer glycidyl methacrylate ester, polymer with tetraethylene
glycol diacrylate 828267-20-5P, **Acrylic**
acid-n-butyl acrylate-N-vinylpyrrolidone copolymer
glycidyl methacrylate ester, polymer with ethoxydiethylene
glycol acrylate and triethylene glycol
diacrylate 828267-21-6P, **Acrylic acid**
-n-butyl acrylate-N-vinylpyrrolidone copolymer glycidyl
methacrylate ester, polymer with methoxytriethylene glycol
acrylate and triethylene glycol diacrylate
828267-24-9P, n-Butyl acrylate-2-ethylhexyl acrylate-glydicyl
methacrylate-N-vinylpyrrolidone copolymer methacrylate, polymer
with tripropylene glycol diacrylate 828267-25-0P, n-Butyl
acrylate-2-ethylhexyl acrylate-glydicyl methacrylate-N-
vinylpyrrolidone copolymer methacrylate, polymer with
2-(2-vinyloxyethoxy)ethyl acrylate 828267-26-1P, n-Butyl
acrylate-2-ethylhexyl acrylate-glydicyl methacrylate-N-

vinylpyrrolidone copolymer methacrylate, polymer with phenoxypolyethylene glycol acrylate and tripropylene glycol diacrylate 828267-28-3P, n-Butyl acrylate-glycidyl methacrylate-N-vinylpyrrolidone copolymer acrylate, polymer with phenoxyethyl acrylate and propoxylated neopentyl glycol diacrylate 828267-30-7P, n-Butyl acrylate-glycidyl methacrylate-N-vinylpyrrolidone copolymer acrylate, polymer with phenoxyethyl acrylate and propoxylated bisphenol A diacrylate 828267-31-8P, n-Butyl acrylate-glycidyl methacrylate-N-vinylpyrrolidone copolymer acrylate, polymer with phenoxyethyl acrylate, propoxylated neopentyl glycol diacrylate, and trimethylolpropane triacrylate 828267-34-1P, n-Butyl acrylate-diethylene glycol monomethacrylate-N-vinylpyrrolidone copolymer Rikacid SA ester, glycidyl methacrylate ester, polymer with phenoxyethyl acrylate and propoxylated neopentyl glycol diacrylate 828267-35-2P, n-Butyl acrylate-diethylene glycol monomethacrylate-N-vinylpyrrolidone copolymer Rikacid SA ester, glycidyl methacrylate ester, polymer with phenoxyethyl acrylate and propoxylated bisphenol A diacrylate 828267-36-3P, n-Butyl acrylate-diethylene glycol monomethacrylate-N-vinylpyrrolidone copolymer Rikacid SA ester, glycidyl methacrylate ester, polymer with phenoxyethyl acrylate, propoxylated neopentyl glycol diacrylate, and trimethylolpropane triacrylate 828267-37-4P, n-Butyl acrylate-glycidyl methacrylate-N-vinylpyrrolidone copolymer methacrylate, polymer with trimethylolpropane triacrylate 828267-38-5P, n-Butyl acrylate-glycidyl methacrylate-N-vinylpyrrolidone copolymer methacrylate, polymer with phenoxyethyl acrylate, propoxylated neopentyl glycol diacrylate, and trimethylolpropane triacrylate 828267-39-6P, n-Butyl acrylate-glycidyl methacrylate-N-vinylpyrrolidone copolymer methacrylate, polymer with propoxylated neopentyl glycol diacrylate and trimethylolpropane triacrylate 828267-40-9P, n-Butyl acrylate-glycidyl methacrylate-N-vinylpyrrolidone copolymer methacrylate, polymer with phenoxyethyl acrylate, propoxylated bisphenol A diacrylate, propoxylated neopentyl glycol diacrylate, and trimethylolpropane triacrylate 828267-41-0P, n-Butyl acrylate-glycidyl methacrylate-N-vinylpyrrolidone copolymer acrylate, polymer with trimethylolpropane triacrylate 828267-42-1P, n-Butyl acrylate-glycidyl methacrylate-N-vinylpyrrolidone copolymer acrylate, polymer with propoxylated neopentyl glycol diacrylate and trimethylolpropane triacrylate 828267-43-2P, n-Butyl acrylate-glycidyl methacrylate-N-vinylpyrrolidone copolymer acrylate, polymer with propoxylated bisphenol A diacrylate, propoxylated neopentyl glycol diacrylate, phenoxyethyl acrylate, and trimethylolpropane triacrylate (actinic ray-curable **compns.** useful for paints and inks with good flexibility, solvent resistance, and adhesiveness to untreated plastics)

L32 ANSWER 4 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:650026 HCAPLUS

DOCUMENT NUMBER: 141:175102

TITLE: Conductive polymer gel and process for producing the same, actuator, patch label for ion introduction, bioelectrode, toner, conductive functional member, antistatic sheet, printed-circuit member, conductive paste, electrode for fuel cell, and fuel cell

INVENTOR(S): Okuzaki, Hidenori; Ishihara, Masayoshi; Endo, Yasuhiro; Takahashi, Yuya

PATENT ASSIGNEE(S): Toppan Forms Co., Ltd., Japan
 SOURCE: PCT Int. Appl., 88 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|--------------|
| WO 2004067637 | A1 | 20040812 | WO 2004-JP713 | 2004 0127 |

W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA,
 BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN,
 CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ,
 EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH,
 GM, HR, HR, HU, HU, ID, IL, IN, IS, KE, KE, KG, KG, KP,
 KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU,
 LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI,
 NI, NO

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|------------------------|----------------|---|--------------|
| PRIORITY APPLN. INFO.: | JP 2003-19120 | A | 2003 0128 |
| | JP 2003-364767 | A | 2003 1024 |
| | JP 2003-379628 | A | 2003 1110 |
| | JP 2003-380427 | A | 2003 1110 |
| | JP 2003-381700 | A | 2003 1111 |
| | JP 2003-381701 | A | 2003 1111 |
| | JP 2003-404884 | A | 2003 1203 |
| | JP 2003-404885 | A | 2003 1203 |

AB A conductive polymer gel comprises water as a major component, a conductive conjugated polymer, and a surfactant and/or an alc. It may contain an electrolyte. The conductive conjugated polymer may be doped with a dopant. The conductive polymer gel is obtained by adding a surfactant and/or an alc. to a colloidal dispersion of a conductive conjugated

polymer and/or to a solution of a conductive conjugated polymer and allowing the mixture to stand to thereby cause it to gel. Thus, 100 parts Baytron P and 0.7 parts dodecylbenzene sulfonic acid were stirred for 10 min and kept at 50° for a day to give a gel with elec. conductivity 0.5 mS/cm.

IT 155090-83-8, Baytron P

(conductive polymer gel for actuator, patch label for ion introduction, bioelectrode, toner, conductive functional member, antistatic sheet, printed-circuit member, conductive paste, electrode for fuel cells)

RN 155090-83-8 HCAPLUS

CN Benzenesulfonic acid, ethenyl-, homopolymer, compd. with 2,3-dihydrothieno[3,4-b]-1,4-dioxin homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 126213-51-2

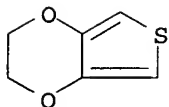
CMF (C6 H6 O2 S)x

CCI PMS

CM 2

CRN 126213-50-1

CMF C6 H6 O2 S



CM 3

CRN 50851-57-5

CMF (C8 H8 O3 S)x

CCI PMS

CM 4

CRN 26914-43-2

CMF C8 H8 O3 S

CCI IDS



D1-CH=CH₂

D1-SO₃H

IC ICM C08L101-00
ICS C08L065-00; H01B001-12; H01M004-86; H01M008-10
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 52, 76
IT **Alcohols**, uses
Polyoxyalkylenes, uses
(conductive polymer gel for actuator, patch label for ion introduction, bioelectrode, toner, conductive functional member, antistatic sheet, printed-circuit member, conductive paste, electrode for fuel cells)
IT **Alcohols**, uses
(polyhydric; conductive polymer gel for actuator, patch label for ion introduction, bioelectrode, toner, conductive functional member, antistatic sheet, printed-circuit member, conductive paste, electrode for fuel cells)
IT 64-17-5, Ethanol, uses 67-63-0, Isopropyl **alcohol**, uses 107-21-1, Ethylene **glycol**, uses 25322-68-3, Polyethylene **glycol**
(conductive polymer gel for actuator, patch label for ion introduction, bioelectrode, toner, conductive functional member, antistatic sheet, printed-circuit member, conductive paste, electrode for fuel cells)
IT 155090-83-8, Baytron P
(conductive polymer gel for actuator, patch label for ion introduction, bioelectrode, toner, conductive functional member, antistatic sheet, printed-circuit member, conductive paste, electrode for fuel cells)

L32 ANSWER 5 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:606509 HCAPLUS

DOCUMENT NUMBER: 141:141254

TITLE: Methods for adjusting conductivity and thickness of poly(3,4-ethylenedioxythiophene)/poly(styrene sulfonate) film by co-solvents

INVENTOR(S): Zhang, Chi

PATENT ASSIGNEE(S): E. I. Du Pont De Nemours and Company, USA

SOURCE: PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|------|
| WO 2004063277 | A1 | 20040729 | WO 2004-US391 | |

2004
0106

W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GH, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ

| | | | |
|---------------|----|----------|----------------|
| US 2004192830 | A1 | 20040930 | US 2003-748965 |
|---------------|----|----------|----------------|

2003

PRIORITY APPLN. INFO.:

US 2003-438170P

P

1230

2003

0106

AB The resistance and thickness of poly(3,4-ethylenedioxythiophene) (PEDT)/poly(styrene sulfonate) (PSS) buffer layers for electroluminescent devices can be adjusted by adding at least one organic solvents selected from **ethers, alcs., alc. ethers, amines, ketones, nitriles, amides, and sulfoxides.**

Thus, the conductivity and thickness of a film formed by an aqueous solution of a PEDT/PSS blend (Baytron P CH 8000) containing different type and amount of co-solvent, such as isopropanol, 2-butoxyethanol, DMF, DMSO, formic acid, and pyridine, was measured.

IT 155090-83-8, Baytron P CH 8000

(methods for adjusting conductivity and thickness of poly(3,4-ethylenedioxythiophene)/poly(styrene sulfonate) film by co-solvents)

RN 155090-83-8 HCAPLUS

CN Benzenesulfonic acid, ethenyl-, homopolymer, compd. with 2,3-dihydrothieno[3,4-b]-1,4-dioxin homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 126213-51-2

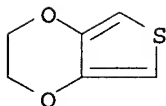
CMF (C6 H6 O2 S)x

CCI PMS

CM 2

CRN 126213-50-1

CMF C6 H6 O2 S



CM 3

CRN 50851-57-5

CMF (C8 H8 O3 S)x

CCI PMS

CM 4

CRN 26914-43-2

CMF C8 H8 O3 S

CCI IDS



D1-CH=CH₂

D1-SO₃H

- IC ICM C08L065-00
ICS H01B001-12; H01L051-30
- CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 42, 76
- IT **Alcohols**, uses
(ether, solvent; methods for adjusting conductivity and thickness of poly(3,4-ethylenedioxythiophene)/poly(styrene sulfonate) film by co-solvents)
- IT **Alcohols**, uses
Amides, uses
Amines, uses
Carboxylic acids, uses
Ethers, uses
Ketones, uses
Nitriles, uses
Sulfoxides
(solvent; methods for adjusting conductivity and thickness of poly(3,4-ethylenedioxythiophene)/poly(styrene sulfonate) film by co-solvents)
- IT 50851-57-5 126213-51-2, Poly(3,4-ethylenedioxythiophene)
155090-83-8, Baytron P CH 8000
(methods for adjusting conductivity and thickness of poly(3,4-ethylenedioxythiophene)/poly(styrene sulfonate) film by co-solvents)
- IT 60-29-7, Diethyl ether, uses 60-35-5, Acetamide, uses 64-17-5, Ethanol, uses 67-56-1, Methanol, uses 71-23-8, 1-Propanol, uses 71-36-3, 1-Butanol, uses 71-41-0, 1-Pentanol, uses 75-05-8, Acetonitrile, uses 75-12-7, Formamide, uses 75-65-0, 2-Methyl-2-propanol, uses 75-84-3, 2,2-Dimethyl-1-propanol 75-86-5, Acetone cyanohydrin 78-59-1, Isophorone 78-82-0, Isobutyronitrile 78-83-1, 2-Methyl-1-propanol, uses 78-92-2, 2-Butanol 78-93-3, Methyl ethyl ketone, uses 79-06-1, Acrylamide, uses 93-61-8, N-Methylformanilide 96-22-0, 3-Pentanone 96-41-3, Cyclopentanol 97-95-0 98-53-3, 4-tert-Butyl cyclohexanone 100-47-0, Benzonitrile, uses 104-76-7, 2-Ethyl-1-hexanol 105-30-6, 2-Methyl-1-pentanol 105-60-2, ε-Caprolactam, uses 106-35-4, 3-Heptanone 107-12-0, Propionitrile 107-13-1, Acrylonitrile, uses 107-16-4, **Glycolonitrile** 107-70-0, 4-Methoxy-4-methyl-2-pentanone 107-87-9, 2-Pentanone 107-98-2, 1-Methoxy-2-propanol 108-10-1, Methyl iso-butyl ketone 108-11-2, 4-Methyl-2-pentanol 108-20-3, Diisopropyl ether 108-82-7, 2,6-Dimethyl-4-heptanol 108-83-8, Diisobutyl ketone 108-94-1, Cyclohexanone, uses 109-59-1, Ethylene glycol mono-isopropyl ether 109-74-0, n-Butyronitrile 109-78-4, Ethylene cyanohydrin 109-86-4,

2-Methoxyethanol 110-12-3, Iso-amyl methyl ketone
 110-43-0, 2-Heptanone 110-59-8, n-Valeronitrile 110-61-2,
 Succinonitrile 110-67-8, 3-Methoxypropionitrile 110-71-4,
 Glyme 110-80-5, 2-Ethoxyethanol 111-27-3, 1-Hexanol, uses
 111-43-3, Dipropyl ether 111-70-6, 1-Heptanol 111-96-6,
 Diglyme 120-92-3, Cyclopentanone 123-19-3, 4-Heptanone
 123-39-7, N-Methyl formamide 123-51-3, 3-Methyl-1-butanol
 127-19-5, Dimethyl acetamide 137-32-6, 2-Methyl-1-butanol
 142-26-7, 2-Acetamidoethanol 142-96-1, Dibutyl ether 354-38-1,
 Trifluoroacetamide 502-42-1, Cycloheptanone 538-86-3, Benzyl
 methyl ether 541-35-5, n-Butyramide 541-85-5,
 5-Methyl-3-heptanone 543-49-7, 2-Heptanol 545-06-2,
 Trichloroacetonitrile 557-17-5, Methyl n-propyl ether
 563-80-4, Isopropyl methyl ketone 565-80-0,
 Diisopropyl ketone 583-59-5, 2-Methylcyclohexanol
 583-60-8, 2-Methylcyclohexanone 584-02-1, 3-Pentanol 589-38-8,
 3-Hexanone 589-55-9, 4-Heptanol 589-82-2, 3-Heptanol
 589-91-3, 4-Methylcyclohexanol 589-92-4, 4-Methylcyclohexanone
 591-23-1, 3-Methylcyclohexanol 591-24-2, 3-Methylcyclohexanone
 591-78-6, 2-Hexanone 598-75-4, 3-Methyl-2-butanol 600-36-2,
 2,4-Dimethyl-3-pentanol 617-84-5, N,N-Diethyl formamide
 623-37-0, 3-Hexanol 625-28-5, Isovaleronitrile 626-93-7,
 2-Hexanol 627-45-2, N-Formylethylamine 628-32-0, Ethyl propyl
 ether 628-73-9, n-Capronitrile 629-08-3, n-Heptanenitrile
 630-18-2, Pivalonitrile 685-91-6, N,N-Diethylacetamide
 754-10-9, Pivalamide 930-68-7, 2-Cyclohexen-1-one 1193-82-4,
 Methyl phenyl sulfoxide 1600-44-8, Tetramethylene
 sulfoxide 1634-04-4, Methyl tert-butyl ether
 1656-48-0, 3,3'-Oxydipropionitrile 1738-36-9,
 Methoxyacetonitrile 2044-64-6, N,N-Dimethylacetoacetamide
 2141-62-0, 3-Ethoxypropionitrile 2168-93-6, Di-n-butyl
 sulfoxide 2425-74-3, N-tert-Butylformamide 2517-43-3,
 3-Methoxy-1-butanol 2550-26-7, Benzyl acetone 2591-86-8,
 1-Formylpiperidine 2700-30-3, N,N-Diisopropylformamide
 3352-87-2, N,N-Diethyldodecanamide 4439-24-1, Ethylene
 glycol monoisobutyl ether 6032-29-7, 2-Pentanol
 6935-65-5, N,N-Dimethyl-m-toluamide 6959-71-3 7580-85-0,
 Ethylene glycol mono-tert-butyl ether 18936-17-9,
 2-Methylbutyronitrile 53778-73-7, 1-Methoxy-2-butanol
 56539-66-3, 3-Methoxy-3-methyl butanol 58654-67-4,
 5-Methyl-2-octanone

(solvent; methods for adjusting conductivity and thickness of
 poly(3,4-ethylenedioxythiophene)/poly(styrene sulfonate) film
 by co-solvents)

L32 ANSWER 6 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:234194 HCAPLUS

DOCUMENT NUMBER: 141:24456

TITLE: Enhanced conductivity of PEDOT-PSS blended
 with non-conductive polymers and single-walled
 carbon nanotubes

AUTHOR(S): Harrison, Benjamin S.; Rickard, David; Liu,
 Wenhua; Guthold, Martin; Czerw, Richard;
 Carroll, David L.

CORPORATE SOURCE: Center for Nanotechnology, Department of
 Physics, Wake Forest University,
 Winston-Salem, NC, USA

SOURCE: Polymer Preprints (American Chemical Society,
 Division of Polymer Chemistry) (2004), 45(1),
 153

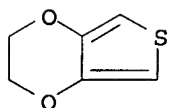
CODEN: ACPPAY; ISSN: 0032-3934
PUBLISHER: American Chemical Society, Division of Polymer Chemistry
DOCUMENT TYPE: Journal; (computer optical disk)
LANGUAGE: English
AB Blends of non-conductive polymers, such as poly(vinyl alc
.), with PEDOT-PSS are shown to improve film conductivity. The
conductivities of PEDOT-PSS films as a function of solvent and
polymer are reported. In addition single-walled carbon nanotubes
were dispersed into the polymeric blends. The effects on the
films conductivity and morphol. will be discussed.
IT 155090-83-8, Baytron P
(enhanced conductivity of PEDOT-PSS blended with non-conductive
polymers and single-walled carbon nanotubes)
RN 155090-83-8 HCAPLUS
CN Benzenesulfonic acid, ethenyl-, homopolymer, compd. with
2,3-dihydrothieno[3,4-b]-1,4-dioxin homopolymer (9CI) (CA INDEX
NAME)

CM 1

CRN 126213-51-2
CMF (C6 H6 O2 S)x
CCI PMS

CM 2

CRN 126213-50-1
CMF C6 H6 O2 S



CM 3

CRN 50851-57-5
CMF (C8 H8 O3 S)x
CCI PMS

CM 4

CRN 26914-43-2
CMF C8 H8 O3 S
CCI IDS



D1-CH=CH₂

D1-SO₃H

CC 37-6 (Plastics Manufacture and Processing)
 Section cross-reference(s): 57, 76
 ST PEDOT polystyrenesulfonic acid polyvinyl alc blend
 carbon nanotube cond
 IT 9003-20-7, Poly(vinyl acetate) 25322-68-3, Polyethylene
 glycol
 (conductivity of PEDOT-PSS blended with non-conductive polymers and
 single-walled carbon nanotubes)
 IT 9002-89-5, Poly(vinyl alcohol) 155090-83-8,
 Baytron P
 (enhanced conductivity of PEDOT-PSS blended with non-conductive
 polymers and single-walled carbon nanotubes)
 REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE
 FOR THIS RECORD. ALL CITATIONS AVAILABLE
 IN THE RE FORMAT

L32 ANSWER 7 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2004:201987 HCAPLUS
 DOCUMENT NUMBER: 141:7830
 TITLE: Preparation and properties of polyimides
 having highly flexible linkages and their
 nanocomposites with organoclays
 AUTHOR(S): Cho, Young Ho; Park, Jong Min; Park, Yun Heum
 CORPORATE SOURCE: School of Applied Chemistry and Chemical
 Engineering, Sungkyunkwan University, Suwon,
 440-746, S. Korea
 SOURCE: Macromolecular Research (2004), 12(1), 38-45
 CODEN: MRAECT; ISSN: 1598-5032
 PUBLISHER: Polymer Society of Korea
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB A highly flexible polyimide (PI) was synthesized successfully from
 ethylene glycol bis(anhydrotrimellitate) (TMEG) and
 1,3-bis(4-aminophenoxy)benzene (TPER) for its application in
 electronics. To enhance the thermal stability and mech.
 properties of this novel PI, we prepared PI nanocomposite films
 using nanoparticles of clays that had been treated with organic
 intercalating agents (organoclays). Two types of organoclays were
 used: montmorillonite (MMT) treated with hexadecylamine (C16) and
 MMT treated with di-Me dihydrogenated tallow quaternary ammonium
 (15A). PI/organoclay hybrid films were obtained by first preparing
 poly(amic acid) (PAA)/organoclay films and then converting the PAA
 to polyimide by thermal conversion. PAA was characterized by
 FT-IR and 1H-NMR spectroscopy and the conversion of PAA to PI was
 confirmed by FT-IR spectroscopy. The dispersion of the
 organoclays in the PI film was analyzed by x-ray diffraction. The

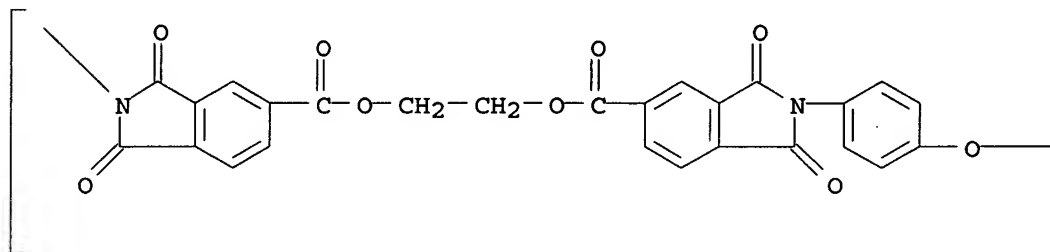
thermal stability and mech. properties of the hybrid films were also studied.

IT 146393-88-6P, 1,3-Bis(4-aminophenoxy)benzene-ethylene glycol bis(anhydrotrimellitate) copolymer, polyimide sru (preparation of polyimides nanocomposites with organoclays useful for electronics)

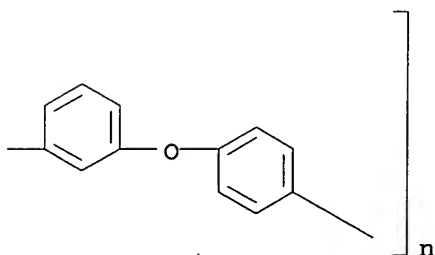
RN 146393-88-6 HCAPLUS

CN Poly[(1,3-dihydro-1,3-dioxo-2H-isoindole-2,5-diyl)carbonyloxy-1,2-ethanediylloxycarbonyl(1,3-dihydro-1,3-dioxo-2H-isoindole-5,2-diyl)-1,4-phenyleneoxy-1,3-phenyleneoxy-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 76

IT 146358-34-1P, 1,3-Bis(4-aminophenoxy)benzene-ethylene glycol bis(anhydrotrimellitate) copolymer, polyamic acid sru 146393-88-6P, 1,3-Bis(4-aminophenoxy)benzene-ethylene glycol bis(anhydrotrimellitate) copolymer, polyimide sru 146526-94-5P, 1,3-Bis(4-aminophenoxy)benzene-ethylene glycol bis(anhydrotrimellitate) copolymer (preparation of polyimides nanocomposites with organoclays useful for electronics)

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 8 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:718698 HCAPLUS

DOCUMENT NUMBER: 139:365714

TITLE: Preparation and characteristics of poly(propylene glycol) and poly(acrylic acid) interpenetrating polymer network hydrogels

AUTHOR(S): Kim, Seon Jeong; Lee, Ki Jung; Kim, In Young;
An, Kay Hyeok; Kim, Sun I.

CORPORATE SOURCE: Department of Biomedical Engineering, Hanyang
University, Seoul, S. Korea

SOURCE: Journal of Applied Polymer Science (2003),
90(5), 1384-1388
CODEN: JAPNAB; ISSN: 0021-8995

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Interpenetrating polymer network (IPN) hydrogels based on
poly(propylene glycol) diacrylate macromer and poly(acrylic acid)
(PAAc) were prepared by UV irradiation and characterized by swelling in
water. The swelling behavior of these IPNs was analyzed in buffer
solution at various temps. Swelling ratios of all IPNs were
relatively high and showed reasonable sensitivity to temperature
Hydrogels showed both pos. and neg. swelling behavior depending on
PAAc content. PA22 and PA13 showed pos. and PA31 showed neg.
temperature-sensitive swelling behavior.

IT 84943-80-6
(crosslinked; preparation and swelling of crosslinked poly(propylene
glycol)-poly(acrylic acid)
interpenetrating polymer network hydrogels)

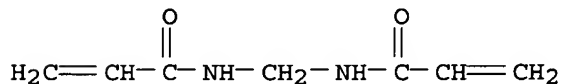
RN 84943-80-6 HCAPLUS

CN 2-Propenoic acid, polymer with 1-ethenyl-2-pyrrolidinone and
N,N'-methylenebis[2-propenamide] (9CI) (CA INDEX NAME)

CM 1

CRN 110-26-9

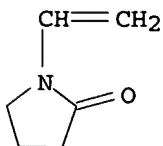
CMF C7 H10 N2 O2



CM 2

CRN 88-12-0

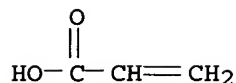
CMF C6 H9 N O



CM 3

CRN 79-10-7

CMF C3 H4 O2



CC 37-6 (Plastics Manufacture and Processing)

IT 84943-80-6

(crosslinked; preparation and swelling of crosslinked poly(propylene glycol)-poly(acrylic acid) interpenetrating polymer network hydrogels)

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 9 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:582623 HCAPLUS

DOCUMENT NUMBER: 139:151161

TITLE: Conductive coating compositions and an electrostatic coating method therefor

INVENTOR(S): Uzawa, Masashi; Saito, Takashi

PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|--------------|
| ----- | ---- | ----- | ----- | |
| JP 2003213148 | A2 | 20030730 | JP 2002-10718 | 2002 0118 |

PRIORITY APPLN. INFO.: JP 2002-10718

2002
0118

AB The compns. have good conductivity, film-formability and storage stability, can be adjusted into variable viscosity with the use of a thickener and film thickness, and contain: (A) a sulfonate- or/and carboxyl-containing water-soluble conductive polymer, (B) a crosslinking agent, (C1) water, (C2) organic solvent, (D) a thickener, (E) a polymeric binder, and (F) a surfactant. In one example a composition comprises poly(2-sulfo-5-methoxy-1,4-iminophenylene) (preparation given) 3, γ -glycidoxypropylmethyldimethoxysilane 1.5, water 65, acetone 35, and Adekanol UH 420 (a thickening agent) 3 parts.

IT 110847-38-6P, Poly[2-(3'-thienyl)ethanesulfonic acid] (preps. of conducting polymers for coating compns. and an electrostatic coating method therefor)

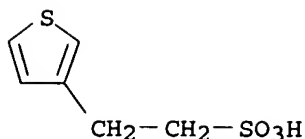
RN 110847-38-6 HCAPLUS

CN 3-Thiopheneethanesulfonic acid, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 110847-37-5

CMF C6 H8 O3 S2



IC ICM C08L101-14
ICS C08K005-00; C08L065-00; C08L079-00; C09D005-00; C09D005-24;
C09D165-00; C09D179-00; C09D201-06; H01B001-20

CC 42-10 (Coatings, Inks, and Related Products)

Section cross-reference(s): 76

IT 1120-71-4DP, 1,3-Propane sultone, reaction products with
polyaniline, sodium salts 25233-30-1DP, Polyaniline, reaction
products with propane sultone, sodium salts 105009-55-0P,
Poly(m-aminobenzenesulfonic acid) 110847-38-6P,
Poly[2-(3'-thienyl)ethanesulfonic acid] 167860-86-8P,
Poly(2-methoxyaniline-5-sulfonic acid)

(prepns. of conducting polymers for coating compns. and an
electrostatic coating method therefor)

IT 67-56-1, Methanol, uses 67-64-1, Acetone, uses 78-93-3, MEK,
uses 108-10-1, Methyl isobutyl ketone
(solvent; in conducting coating compns. and an electrostatic
coating method therefor)

L32 ANSWER 10 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:525557 HCAPLUS

DOCUMENT NUMBER: 139:102481

TITLE: Transparent conductive coating material,
substrates coated with, and displays prepared
therefrom

INVENTOR(S): Kumasawa, Mitsuaki; Hirai, Toshiharu

PATENT ASSIGNEE(S): Catalysts and Chemicals Industries Co., Ltd.,
Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|--------------|
| ----- | ---- | ----- | ----- | |
| JP 2003192994 | A2 | 20030709 | JP 2001-397933 | 2001 1227 |

PRIORITY APPLN. INFO.: JP 2001-397933

2001
1227

AB Coating material, which has low surface elec. resistance, high
antistatic performance, good electromagnetic shielding property
and acid resistance, and super adhesion to the substrate, is
composed of an electroconductive polymer, inorg. oxide particles
with refractive index of 1.28-1.42, matrix component, and polar
solvents. Substrate and displays prepared from the above conductive
coating material are also provided in the invention. Thus, 16
weight% conductive polythiophene prepared from the polymerization of

3-hexylthiophene, 4 weight% matrix composition containing Me silicate (Me silicate 51), and 3.2 weight% inorg. oxide particle dispersion comprising SiO₂ and Al₂O₃ were dissolved in iso-Pr.alc ./water solvent to obtain the conductive coating material.

IT 224644-14-8P

(transparent conductive coating material for substrates and displays)

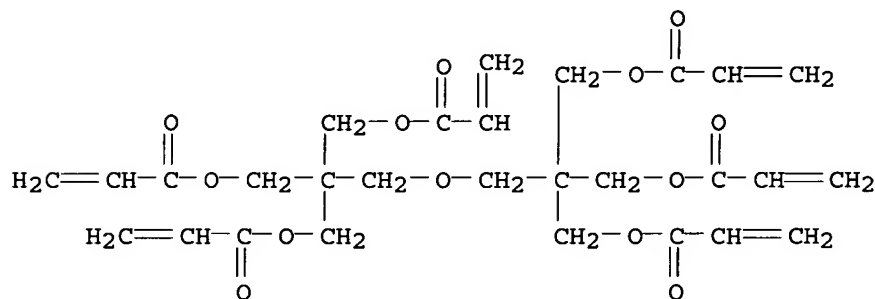
RN 224644-14-8 HCAPLUS

CN 2-Propenoic acid, 2-(hydroxymethyl)-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 1-ethenyl-2-pyrrolidinone and 2-[[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 29570-58-9

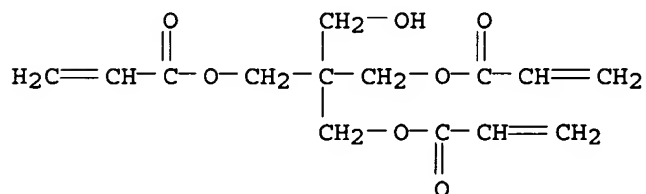
CMF C28 H34 O13



CM 2

CRN 3524-68-3

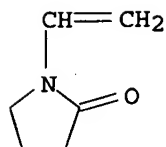
CMF C14 H18 O7



CM 3

CRN 88-12-0

CMF C6 H9 N O



IC ICM C09D201-00
ICS B32B007-02; C09D005-24; H01B005-14
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 38, 74, 76
IT 25233-30-1DP, Polyaniline, sulfonated 104934-50-1P,
3-Hexylthiophene homopolymer **224644-14-8P**
(transparent conductive coating material for substrates and displays)

L32 ANSWER 11 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:509942 HCAPLUS
DOCUMENT NUMBER: 139:69958
TITLE: Aqueous dispersions containing
3,4-alkylenedioxythiophene copolymers and
polyanions
INVENTOR(S): Louwet, Frank
PATENT ASSIGNEE(S): Agfa-Gevaert, Belg.
SOURCE: Eur. Pat. Appl., 20 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| EP 1323763 | A1 | 20030702 | EP 2001-779 | 2001 1220 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| WO 2003054052 | A1 | 20030703 | WO 2002-EP13157 | 2002 1122 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1458785 | A1 | 20040922 | EP 2002-781326 | 2002 1122 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, | | | | |

EE, SK
 US 2003149171 A1 20030807 US 2002-321888 2002
 1217
 US 2005009986 A1 20050113 US 2004-844551 2004
 0512
 PRIORITY APPLN. INFO.: EP 2001-779 A 2001
 1220
 US 2002-350817P P 2002
 0122
 WO 2002-EP13157 W 2002
 1122
 US 2002-321888 A2 2002
 1217

AB An aqueous dispersion comprises a polyanion and a copolymer of at least one 3,4-alkylenedioxythiophene compound with solubility in water at 25° < 2.2 g/L with at least one 3,4-alkylenedioxythiophene compound with solubility in water at 25° of at least 2.2 g/L. The copolymer is produced by redox polymerization, and the polyanion is polystyrenesulfonic acid. The aqueous dispersions are used for production of printing pastes, electro-conductive layers, antistatic layers, and as coating materials. Thus, an aqueous dispersion was produced by mixing 5.99%-aqueous solution of polystyrenesulfonic acid (Mw 290,000) (87), deionized water (413), 3,4-ethylenedioxythiophene (1.92), and 2,3-dihydrothieno[3,4-b]-1,4-dioxin-2-methanol (0.258 g), and polymerizing the dioxythiophene comonomers under nitrogen in the presence of iron (III) sulfate and sodium persulfate (Na₂S₂O₈).

IT 204444-04-2P 540803-71-2P
 (aqueous dispersions containing 3,4-alkylenedioxythiophene copolymers and polyanions)

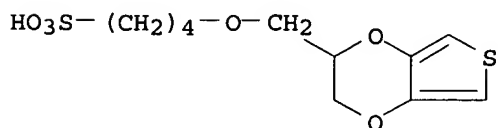
RN 204444-04-2 HCAPLUS.

CN 1-Butanesulfonic acid, 4-[(2,3-dihydrothieno[3,4-b]-1,4-dioxin-2-yl)methoxy]-, sodium salt, polymer with 2,3-dihydrothieno[3,4-b]-1,4-dioxin (9CI) (CA INDEX NAME)

CM 1

CRN 204444-01-9

CMF C11 H16 O6 S2 . Na

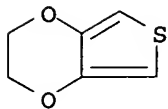


● Na

CM 2

CRN 126213-50-1

CMF C6 H6 O2 S



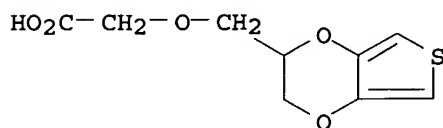
RN 540803-71-2 HCAPLUS

CN Acetic acid, [(2,3-dihydrothieno[3,4-b]-1,4-dioxin-2-yl)methoxy]-, polymer with 2,3-dihydrothieno[3,4-b]-1,4-dioxin (9CI) (CA INDEX NAME)

CM 1

CRN 540803-67-6

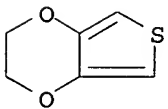
CMF C9 H10 O5 S



CM 2

CRN 126213-50-1

CMF C6 H6 O2 S



IC ICM C08G061-12

ICS C09D165-00

CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 42, 76

IT 204444-04-2P 540803-69-8P 540803-70-1P

540803-71-2P 540803-72-3P 540803-73-4P

(aqueous dispersions containing 3,4-alkylenedioxythiophene copolymers and polyanions)

IT 1633-83-6, Butanesultone 3132-64-7, Epibromohydrin 9004-74-4,

Poly(ethylene glycol) monomethyl ether 51792-34-8,

3,4-Dimethoxythiophene 58416-04-9 95535-29-8,

2,5,8,11-Tetraoxatetradecane-13,14-diol 540803-66-5

(preparation of 3,4-alkylenedioxythiophenes for production of copolymers and aqueous dispersions of copolymers and polyanions)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE

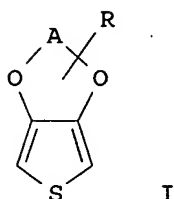
FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L32 ANSWER 12 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2003:488620 HCAPLUS
 DOCUMENT NUMBER: 139:53756
 TITLE: Production and polymerization of
 3,4-alkylenedioxythiophene compounds
 INVENTOR(S): Groenendaal, Bert
 PATENT ASSIGNEE(S): Agfa-Gevaert, Belg.
 SOURCE: Eur. Pat. Appl., 21 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|-------------------|
| EP 1321483 | A1 | 20030625 | EP 2001-781 | 2001 1220 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| WO 2003054053 | A1 | 20030703 | WO 2002-EP13158 | 2002 1122 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1458784 | A1 | 20040922 | EP 2002-777360 | 2002 1122 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | | | |
| US 2003176628 | A1 | 20030918 | US 2002-319976 | 2002 1216 |
| US 6852830 | B2 | 20050208 | | |
| PRIORITY APPLN. INFO.: | | | | |
| | | | EP 2001-781 | A 2001 1220 |
| | | | US 2002-349523P | P 2002 0118 |
| | | | WO 2002-EP13158 | W 2002 |

1122

OTHER SOURCE(S) : MARPAT 139:53756
GI



AB A thiophene compound is represented by the general formula (I), where A is a C1-5-alkylene bridge; R is -R1-COR2; R1 is -R3- or -R4-X-R5-; R2 is hydrogen, a hydroxy group, a thiol group, -NR6R7, -OR8 or -SR9; R3, R4 and R5 are independently an alkylene group or an arylene group; X is -O-, -S- or =NR10; R6 and R7 are independently hydrogen, an optionally substituted amino group or an optionally substituted alkyl group; R8 and R9 are independently an alkyl group optionally substituted with at least one substituent selected from alc., amide, ether, ester and sulfonate group, or an optionally substituted aryl group, or -SiR11R12R13; R10 is an alkyl, aryl or acyl group; and R11, R12 and R13 are independently an optionally substituted alkoxy or alkyl group. Conducting polymers produced from the thiophenes of the invention by chemical or electrochem. polymerization are characterized by low absorption of visible light, high absorption of IR radiation and can be used in coating compns., printing pastes and antistatic materials. Thus, (2,3-dihydrothieno[3,4-b]-1,4-dioxin-2-methoxy)acetic acid was produced and electrochem. polymerized (0.7-0.9 V and 5 mA/cm²) at 25° in acetonitrile in the presence of NaClO₄ to obtain a homopolymer having conductivity of 400 S/cm.

IT 540803-71-2P
(production of conducting polymers of 3,4-alkylenedioxythiophene compds.)

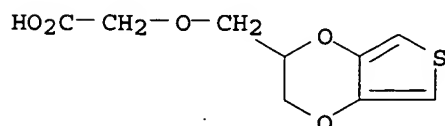
RN 540803-71-2 HCAPLUS

CN Acetic acid, [(2,3-dihydrothieno[3,4-b]-1,4-dioxin-2-yl)methoxy]-, polymer with 2,3-dihydrothieno[3,4-b]-1,4-dioxin (9CI) (CA INDEX NAME)

CM 1

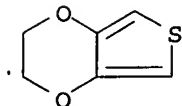
CRN 540803-67-6

CMF C9 H10 O5 S



CM 2

CRN 126213-50-1
CMF C6 H6 O2 S



IC ICM C08G061-12
ICS H01B001-12; C09K009-02; C07D495-04
CC 37-2 (Plastics Manufacture and Processing)
Section cross-reference(s): 42, 76
IT 540803-71-2P
(production of conducting polymers of 3,4-alkylenedioxythiophene compds.)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE
FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L32 ANSWER 13 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:403578 HCAPLUS
DOCUMENT NUMBER: 138:402833
TITLE: Antistatic multilayer films for integrated
circuit carrier tapes
INVENTOR(S): Kitazawa, Satoshi; Kubo, Koji
PATENT ASSIGNEE(S): Teijin-Du Pont Film Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

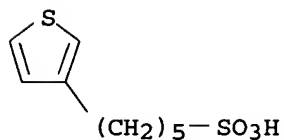
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|--------------|
| JP 2003154594 | A2 | 20030527 | JP 2001-354188 | 2001 1120 |

PRIORITY APPLN. INFO.: JP 2001-354188

2001
1120

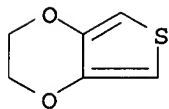
AB The films, showing good blocking resistance and less discoloration in recycling, comprise polyester substrate films and antistatic surface layers (surface resistivity $2 + 10^7 - 5 + 10^9$ Ω /.box.) comprising (A) acrylic copolymers ($-10^\circ \leq T_g \leq 50^\circ$) 40-85, (B) thiophene (derivs.) polymers as antistatic agents 10-50, and (C) surfactants 1-10%. The films may have carbon layers and polyethylene layers on the surfaces. Thus, a PET film having a surface layer comprising 65:30:5 (%) Et acrylate-2-hydroxyethyl acrylate-Me methacrylate-N-methylol methacrylamide copolymer (T_g 39°), Baytron P (styrenesulfonic polymer-doped polythiophene conducting polymers), and Sannonic SS 70 (polyoxyethylene lauryl ether) showed surface resistivity $8 + 10^8$ Ω /.box., high blocking resistance, and no discoloration in recycling.

IT 528856-34-0
 (styrenesulfonic ion polymer-doped, antistatic agents;
 multilayer films containing polythiophene antistatic agents for
 integrated circuit carrier tapes)
 RN 528856-34-0 HCAPLUS
 CN 3-Thiophenepentanesulfonic acid, sodium salt, polymer with
 2,3-dihydrothieno[3,4-b]-1,4-dioxin (9CI) (CA INDEX NAME)
 CM 1
 CRN 528856-33-9
 CMF C9 H14 O3 S2 . Na



● Na

CM 2
 CRN 126213-50-1
 CMF C6 H6 O2 S



IC ICM B32B007-02
 ICS B32B027-18; B32B027-30; B32B027-36
 CC 38-3 (Plastics Fabrication and Uses)
 Section cross-reference(s): 76
 IT **Alcohols**, uses
 (C11-15-secondary, ethoxylated, surfactants, antistatic surface
 layers, Sannonic SS 70; multilayer films containing polythiophene
 antistatic agents for integrated circuit carrier tapes)
 IT 528856-34-0
 (styrenesulfonic ion polymer-doped, antistatic agents;
 multilayer films containing polythiophene antistatic agents for
 integrated circuit carrier tapes)

L32 ANSWER 14 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2003:390856 HCAPLUS
 DOCUMENT NUMBER: 138:385931
 TITLE: Process for making a vinyl amide polymer
 composition for skin and hair
 compositions
 INVENTOR(S): Prettypaul, Donald I.; Shih, Jenn S.
 PATENT ASSIGNEE(S): ISP Investments Inc., USA
 SOURCE: U.S., 4 pp.

DOCUMENT TYPE: CODEN: USXXAM
 LANGUAGE: Patent
 English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|--------------|
| US 6566473 | B1 | 20030520 | US 2002-300124 | 2002 1120 |

| | | | | |
|---------------|----|----------|-----------------|--------------|
| WO 2004046212 | A1 | 20040603 | WO 2003-US32815 | 2003 1016 |
|---------------|----|----------|-----------------|--------------|

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-300124 A
 2002
 1120

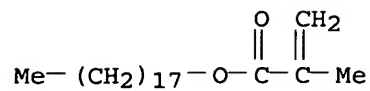
AB A non-aqueous, heterogeneous polymerization process comprises heating a reaction mixture of about 5-70%, preferably 10-50%, of a vinyl amide monomer in an oil as solvent, and a water-soluble cosolvent, and a free radical initiator, optionally in the presence of a crosslinking agent and/or a surfactant, wherein the oil solvent is present in an amount sufficient to keep the resultant polymer in a stirrable state throughout the polymerization. The polymer reaction product is capable of forming a uniform emulsion or gel upon addition of water thereto.

IT 133573-65-6P, Acrylic acid-stearyl methacrylate-N-vinylpyrrolidone copolymer 527685-31-0P, Acrylic acid-pentaerythritol triallyl ether-N-vinylpyrrolidone copolymer 527685-32-1P, Acrylic acid-pentaerythritol triallyl ether-stearyl methacrylate-N-vinylpyrrolidone copolymer 527685-33-2P, Acrylic acid -N,N,-dimethylaminopropyl methacrylamide-pentaerythritol triallyl ether-N-vinylpyrrolidone copolymer (preparation of crosslinked vinyl amide polymer composition for skin and hair compns.)

RN 133573-65-6 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with 1-ethenyl-2-pyrrolidinone and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

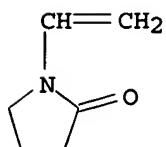
CRN 32360-05-7
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CM 2

CRN 88-12-0

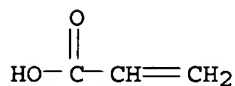
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CM 3

CRN 79-10-7

CMF C3 H4 O2



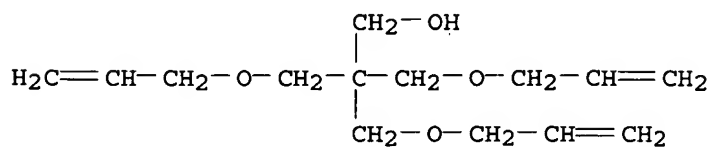
RN 527685-31-0 HCAPLUS

CN 2-Propenoic acid, polymer with 1-ethenyl-2-pyrrolidinone and
 3-(2-propenyloxy)-2,2-bis[(2-propenyloxy)methyl]-1-propanol (9CI)
 (CA INDEX NAME)

CM 1

CRN 1471-17-6

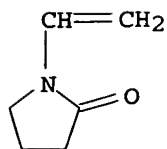
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CM 2

CRN 88-12-0

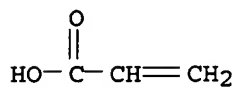
CMF C6 H9 N O



CM 3

CRN 79-10-7

CMF C3 H4 O2



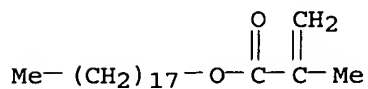
RN 527685-32-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with
 1-ethenyl-2-pyrrolidinone, 2-propenoic acid and
 3-(2-propenyloxy)-2,2-bis[(2-propenyloxy)methyl]-1-propanol (9CI)
 (CA INDEX NAME)

CM 1

CRN 32360-05-7

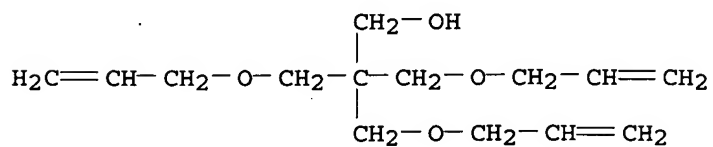
CMF C22 H42 O2



CM 2

CRN 1471-17-6

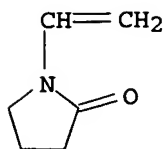
CMF C14 H24 O4



CM 3

CRN 88-12-0

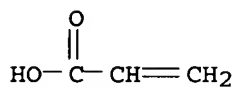
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CM 4

CRN 79-10-7

CMF C3 H4 O2



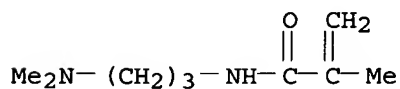
RN 527685-33-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-(dimethylamino)propyl ester,
polymer with 1-ethenyl-2-pyrrolidinone, 2-propenoic acid and
3-(2-propenyloxy)-2,2-bis[(2-propenyloxy)methyl]-1-propanol (9CI)
(CA INDEX NAME)

CM 1

CRN 5205-93-6

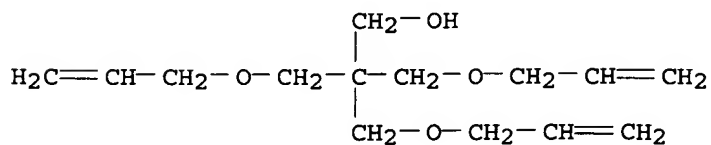
CMF C9 H18 N2 O



CM 2

CRN 1471-17-6

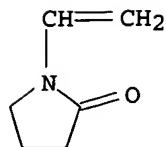
CMF C14 H24 O4



CM 3

CRN 88-12-0

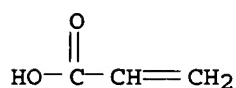
CMF C6 H9 N O



CM 4

CRN 79-10-7

CMF C3 H4 O2



- IC ICM C08F026-08
 INCL 526264000; 526194000; 526210000; 526219600; 526232100; 526236000;
 526307100; 526307300; 526307500; 526317100
 CC 35-4 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 62
 IT Cosmetics
 (preparation of crosslinked vinyl amide polymer **composition** for
 skin and hair **compns.**)
 IT Glycols, uses
 Hydrocarbon oils
 Polysiloxanes, uses
 (preparation of crosslinked vinyl amide polymer **composition** for
 skin and hair **compns.**)
 IT Vinyl compounds, reactions
 (preparation of crosslinked vinyl amide polymer **composition** for
 skin and hair **compns.**)
 IT Polymerization
 (radical; preparation of crosslinked vinyl amide polymer
composition for skin and hair **compns.**)
 IT 133573-65-6P, Acrylic acid-stearyl
 methacrylate-N-vinylpyrrolidone copolymer 527685-31-0P,
 Acrylic acid-pentaerythritol triallyl
 ether-N-vinylpyrrolidone copolymer 527685-32-1P,
 Acrylic acid-pentaerythritol triallyl
 ether-stearyl methacrylate-N-vinylpyrrolidone copolymer
 527685-33-2P, Acrylic acid
 -N,N,-dimethylaminopropyl methacrylamide-pentaerythritol triallyl
 ether-N-vinylpyrrolidone copolymer
 (preparation of crosslinked vinyl amide polymer
composition for skin and hair **compns.**)
 IT 57-55-6, Propylene glycol, uses 107-41-5, 2-Methyl-2,4-
 pentanediol 110-27-0, Isopropyl myristate 142-91-6, Isopropyl
 palmitate 629-11-8, 1,6-Hexane diol 6938-94-9, Diisopropyl
 adipate 16432-53-4, 1,4-Hexane diol 25339-09-7, Isocetyl
 stearate
 (preparation of crosslinked vinyl amide polymer **composition** for
 skin and hair **compns.**)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE
 FOR THIS RECORD. ALL CITATIONS AVAILABLE
 IN THE RE FORMAT

L32 ANSWER 15 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:173706 HCAPLUS

DOCUMENT NUMBER: 138:222562

TITLE: Adhesive sheet with controllable strength by irradiation for fabrication of semiconductor device

INVENTOR(S): Kawakami, Hiroyuki; Inada, Teiichi; Masuko, Takashi; Ookubo, Keisuke; Hatakeyama, Keiichi; Yanagawa, Toshiyuki; Katogi, Shigeki

PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 132 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|-----------|
| WO 2003018703 | A1 | 20030306 | WO 2002-JP8616 | 2002 0827 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

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|---------------|----|----------|----------------|-----------|
| JP 2004043760 | A2 | 20040212 | JP 2002-246802 | 2002 0827 |
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| JP 2004043761 | A2 | 20040212 | JP 2002-246833 | 2002 0827 |
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| JP 2004043762 | A2 | 20040212 | JP 2002-246879 | 2002 0827 |
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| JP 2004043763 | A2 | 20040212 | JP 2002-246932 | 2002 0827 |
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| PRIORITY APPLN. INFO.: | JP 2001-256285 | A | 2001 0827 |
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| JP 2001-256286 | A | 2001 0827 |
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| JP 2001-262662 | A | 2001 0831 |
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| JP 2001-269013 | A |
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|----------------|---|--------------|
| | | 2001 0905 |
| JP 2002-35488 | A | 2002 0213 |
| JP 2002-37032 | A | 2002 0214 |
| JP 2002-76577 | A | 2002 0319 |
| JP 2002-83777 | A | 2002 0325 |
| JP 2002-83818 | A | 2002 0325 |
| JP 2002-83844 | A | 2002 0325 |
| JP 2002-137252 | A | 2002 0513 |

OTHER SOURCE(S): MARPAT 138:222562

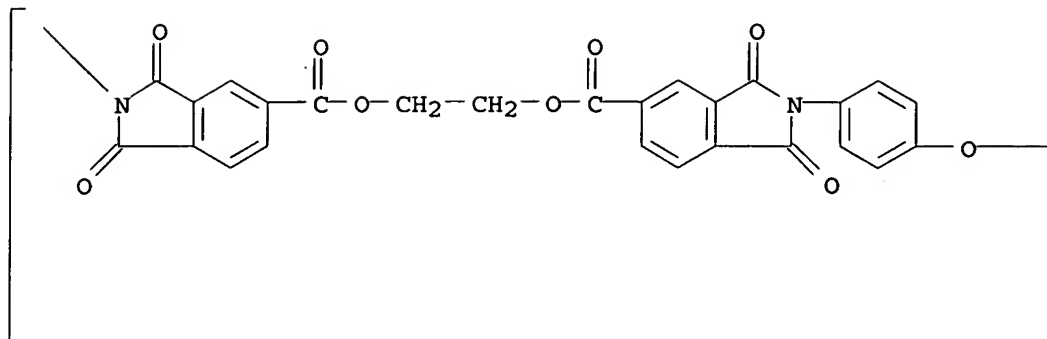
AB Title adhesive sheet comprises a substrate (e.g., PET Tetron G2-50) and an adhesive layer composed of (A) thermoplastic resins (e.g., acrylic rubber HTR-860P-3), (B) thermally polymerizable compds. (e.g., epoxy resin YDCN 703 and crosslinker LF 2882) , and (C) radiation-induced basic compds. (e.g., a (2-nitrobenzyl)carbomic acid derivative prepared from 2-nitrobenzyl alc. and 4,4'-biphenylmethanediisocyanate). Thus, the prepared sheet showed vertical peeling strength 4000 and 80 mN/cm, tack strength 1.5 and 0.3 N, flow length 1700 and 1200 μ m, melt viscosity 90 and 800 Pa.s before and after irradiation, resp., good heat- and moisture-resistance, and good dicing pickup.

IT 146393-87-5P 210980-98-6P, 2,2-Bis[4-(4-aminophenoxy)phenyl]propane-decamethylene bis(trimellitate anhydride) copolymer, sru
(adhesive sheet with controllable strength by irradiation for fabrication of semiconductor device)

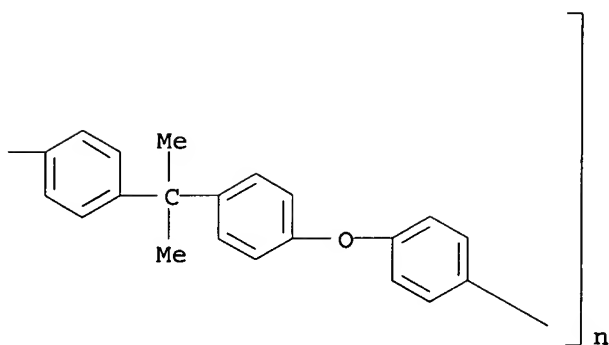
RN 146393-87-5 HCAPLUS

CN Poly[(1,3-dihydro-1,3-dioxo-2H-isoindole-2,5-diyl)carbonyloxy-1,2-ethanediyloxycarbonyl(1,3-dihydro-1,3-dioxo-2H-isoindole-5,2-diyl)-1,4-phenyleneoxy-1,4-phenylene(1-methylethylidene)-1,4-phenyleneoxy-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A

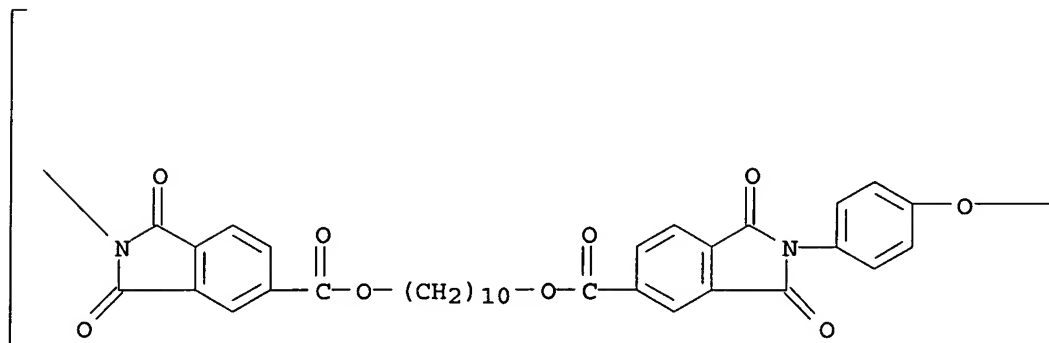


PAGE 1-B

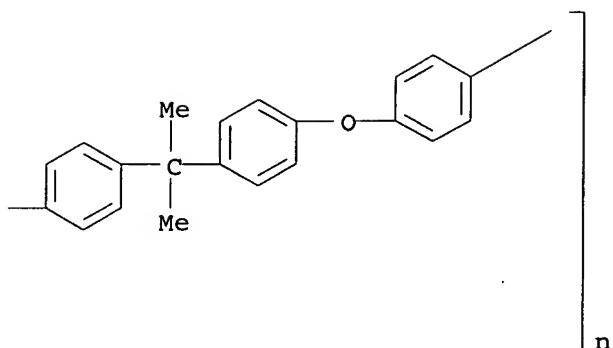


RN 210980-98-6 HCAPLUS
 CN Poly[(1,3-dihydro-1,3-dioxo-2H-isoindole-2,5-diyl)carbonyloxy-1,10-decanediylloxycarbonyl (1,3-dihydro-1,3-dioxo-2H-isoindole-5,2-diyl)-1,4-phenyleneoxy-1,4-phenylene (1-methylethylidene)-1,4-phenyleneoxy-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



- IC ICM C09J007-02
ICS C09J163-00
- CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 76
- IT 2783-17-7DP, 1,12-Diaminododecane, polymers with amino-terminated polysiloxanes, Etherdiamine 2000, and isopropylidenediphenoxy bis(phthalic dianhydride) 9046-10-0DP, polymers with amino-terminated polysiloxanes, diaminododecane, and isopropylidenediphenoxy bis(phthalic dianhydride) 25101-32-0P, 2-Propenoic acid, 2-methyl-, oxybis(2,1-ethanediyl)oxy-2,1-ethanediyl ester homopolymer 38103-06-9DP, 4,4'-[4,4'-Isopropylidenedi(p-phenyleneoxy)]bis(phthalic anhydride), polymers with amino-terminated polysiloxanes, diaminododecane, and ether diamines 146343-43-3P, 2,2-Bis[4-(4-aminophenoxy)phenyl]propane-ethylenebis(trimellitate dianhydride) copolymer 146393-87-5P 210980-97-5P, 2,2-Bis[4-(4-aminophenoxy)phenyl]propane-decamethylene bis(trimellitate anhydride) copolymer 210980-98-6P, 2,2-Bis[4-(4-aminophenoxy)phenyl]propane-decamethylene bis(trimellitate anhydride) copolymer, sru 353451-34-0P 353451-35-1P 426266-27-5P 671755-89-8P
(adhesive sheet with controllable strength by irradiation for fabrication of semiconductor device)
- IT 57-14-7DP, N,N-Dimethyl hydrazine, reaction products with Me p-nitrobenzoate and Ph glycidyl ether 70-11-1DP, Phenacyl bromide, reaction products with 1-benzyl-2-methylimidazole and sodium tetra-Ph borate 99-81-0DP, p-Nitrophenacyl bromide, reaction products with 1,2-dimethylimidazole and sodium tetra-Ph borate 101-68-8DP, 4,4'-Diphenylmethanediisocyanate, reaction products with 2-nitrobenzyl alc. 143-66-8DP, Sodium tetraphenyl borate, reaction products with phenacyl bromides and methylimidazoles 612-25-9DP, 2-Nitrobenzyl alcohol, reaction products with 4,4'-biphenylmethanediisocyanate 619-50-1DP, Methyl p-nitrobenzoate, reaction products with N,N-di-Me hydrazine and Ph glycidyl ether 1129-35-7DP, Methyl p-cyanobenzoate, reaction products with N,N-di-Me hydrazine and Ph glycidyl ether 1739-84-0DP, 1,2-Dimethylimidazole, reaction products with p-nitrophenacyl bromide and sodium tetra-Ph borate 13750-62-4DP, 1-Benzyl-2-methylimidazole, reaction products with phenacyl bromide and sodium tetra-Ph borate
(radiation-induced basic compound; adhesive sheet with controllable strength by irradiation for fabrication of

semiconductor device)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE
FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L32 ANSWER 16 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:23250 HCAPLUS

DOCUMENT NUMBER: 138:74830

TITLE: Compositions produced by solvent exchange
methods and coating uses in electronic devicesINVENTOR(S): Haghighat, R. Ross; Ryu, Jae; Mojazza, Hamid
R.; Vinciguerra, Michael A.; Schuler, Peter

PATENT ASSIGNEE(S): Elecon, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 41 pp., Cont.-in-part
of U.S. Provisional Ser. No. 298,174.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| US 2003006401 | A1 | 20030109 | US 2001-999171 | 2001 1130 |
| US 6692662 | B2 | 20040217 | | |
| WO 2002067273 | A1 | 20020829 | WO 2002-US4679 | 2002 0215 |
| WO 2002067273 | C1 | 20021031 | | |
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| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1360701 | A1 | 20031112 | EP 2002-721021 | 2002 0215 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| JP 2004532292 | T2 | 20041021 | JP 2002-566505 | 2002 0215 |
| US 2003164477 | A1 | 20030904 | US 2002-167043 | 2002 0610 |
| US 6692663 | B2 | 20040217 | | |
| US 2003015691 | A1 | 20030123 | US 2002-211424 | 2002 0801 |
| US 6852250 | B2 | 20050208 | | |
| US 2004258951 | A1 | 20041223 | US 2003-744110 | |

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|------------------------|----|----------|-----------------|-------------------|
| | | | | 2003 1222 |
| US 2004258952 | A1 | 20041223 | US 2003-744671 | |
| | | | | 2003 1222 |
| PRIORITY APPLN. INFO.: | | | US 2001-269606P | P 2001 0216 |
| | | | US 2001-298174P | P 2001 0613 |
| | | | US 2001-999171 | A 2001 1130 |
| | | | WO 2002-US4679 | W 2002 0215 |

OTHER SOURCE(S): MARPAT 138:74830

AB Compns. are formed by a method for exchanging solvent in a mixture that includes H₂O and an optionally substituted thiophene such as Baytron P.

IT 155090-83-8, Baytron P
(solvent exchange processing for polythiophene-water mixts. and blends and conductive films and coatings)

RN 155090-83-8 HCAPLUS

CN Benzenesulfonic acid, ethenyl-, homopolymer, compd. with 2,3-dihydrothieno[3,4-b]-1,4-dioxin homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 126213-51-2

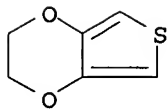
CMF (C6 H6 O2 S)x

CCI PMS

CM 2

CRN 126213-50-1

CMF C6 H6 O2 S



CM 3

CRN 50851-57-5

CMF (C8 H8 O3 S)x

CCI PMS

CM 4

CRN 26914-43-2
CMF C8 H8 O3 S
CCI IDS



D1-CH=CH₂

D1-SO₃H

IC ICM H01C001-00

INCL 252500000

CC 42-10 (Coatings, Inks, and Related Products)

Section cross-reference(s): 38, 73, 76

IT 56-81-5, Glycerin, uses 60-29-7, Diethyl ether, uses 67-68-5,

DMSO, uses 68-12-2, N,N-Dimethylformamide, uses 75-05-8,

Acetonitrile, uses 75-09-2, Dichloromethane, uses 75-52-5,

Nitromethane, uses 98-95-3, Nitrobenzene, uses 100-47-0,

Benzonitrile, uses 105-34-0, Methylcyanoacetate 107-12-0,

Propionitrile 107-21-1, Ethylene glycol, uses

108-32-7, Propylene carbonate 110-71-4 127-19-5,

Dimethylacetamide 872-50-4, N-Methylpyrrolidone, uses

7732-18-5, Water, uses

(solvent exchange processing for polythiophene-water mixts. and blends and conductive films and coatings)

IT 155090-83-8, Baytron P

(solvent exchange processing for polythiophene-water mixts. and blends and conductive films and coatings)

L32 ANSWER 17 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:688251 HCAPLUS

DOCUMENT NUMBER: 137:218091

TITLE: Adhesive sheet for both wafer-supporting and die-attaching in fabrication of semiconductor device

INVENTOR(S): Sugiura, Minoru; Hasegawa, Yuji; Aichi, Katsuhide; Masuko, Takashi

PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|--------------|
| JP 2002256237 | A2 | 20020911 | JP 2001-56735 | 2001 0301 |

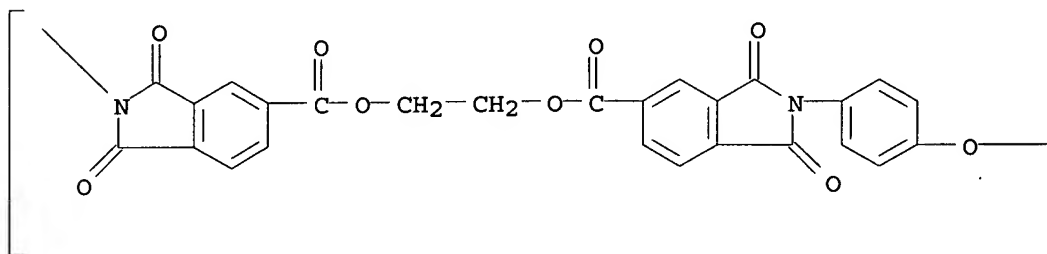
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JP 2001-56735

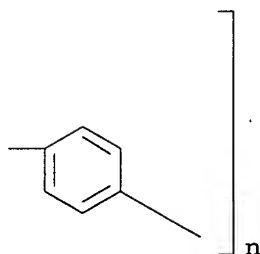
2001
0301

- AB Title adhesive sheet is prepared by forming on a radiation-curable substrate an adhesive layer having water absorption ≤ 1.5 vol%. Thus, a substrate comprising 100 parts of Bu methacrylate-methacrylic acid-Me methacrylate-2-ethylhexyl acrylate copolymer and 60 parts of trimethylolpropane triacrylate/polyethylene glycol dimethacrylate (20/10) mixture was laminated with an 80 wt% Ag-containing adhesive layer of 1,2-(ethylene)bis(trimellitate anhydride)-bis(4-amino-3,5-dimethylphenyl)methane copolymer 100 and epoxy resin 10 parts, to give an adhesive sheet.
- IT 36496-83-0 182681-58-9 210980-98-6
(in adhesive layer of sheet for both wafer-supporting and die-attaching in fabrication of semiconductor device)
- RN 36496-83-0 HCAPLUS
- CN Poly[(1,3-dihydro-1,3-dioxo-2H-isoindole-2,5-diyl)carbonyloxy-1,2-ethanediylloxycarbonyl(1,3-dihydro-1,3-dioxo-2H-isoindole-5,2-diyl)-1,4-phenyleneoxy-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A

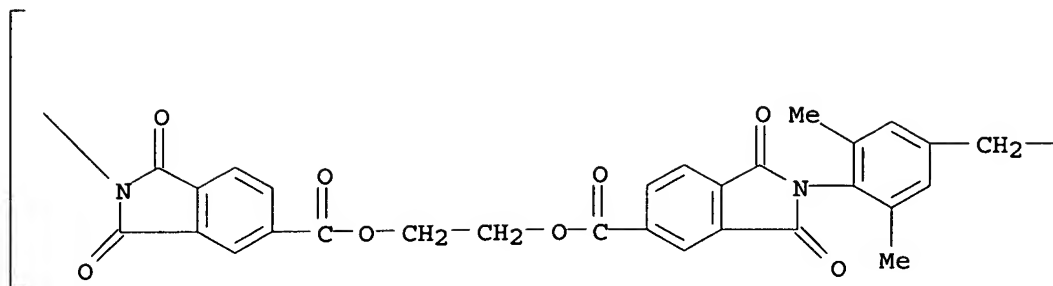


PAGE 1-B

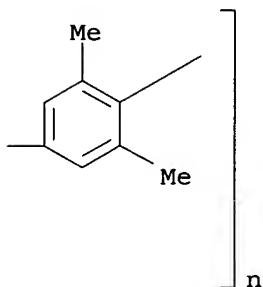


- RN 182681-58-9 HCAPLUS
- CN Poly[(1,3-dihydro-1,3-dioxo-2H-isoindole-2,5-diyl)carbonyloxy-1,2-ethanediylloxycarbonyl(1,3-dihydro-1,3-dioxo-2H-isoindole-5,2-diyl)(2,6-dimethyl-1,4-phenylene)methylene(3,5-dimethyl-1,4-phenylene)] (9CI) (CA INDEX NAME)

PAGE 1-A

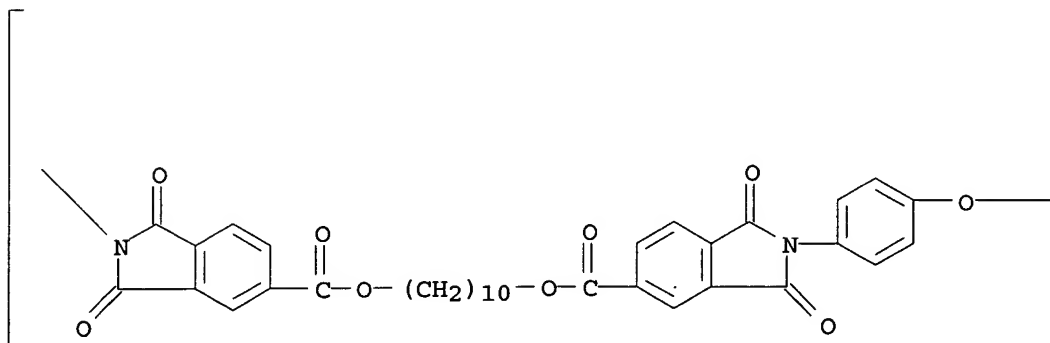


PAGE 1-B

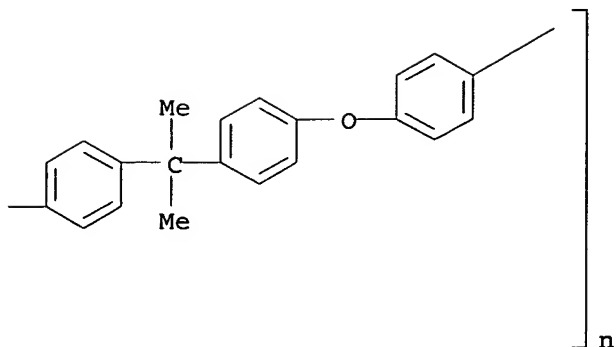


RN 210980-98-6 HCAPLUS
 CN Poly[(1,3-dihydro-1,3-dioxo-2H-isoindole-2,5-diyl)carbonyloxy-1,10-decanediylloxycarbonyl(1,3-dihydro-1,3-dioxo-2H-isoindole-5,2-diyl)-1,4-phenyleneoxy-1,4-phenylene(1-methylethylidene)-1,4-phenyleneoxy-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM C09J007-02
 ICS C08G073-10; C09J005-00; C09J163-00; C09J179-08; H01L021-52
 CC 38-3 (Plastics Fabrication and Uses)
 Section cross-reference(s): 76
 IT 431879-23-1P, Butyl methacrylate-2-ethylhexyl acrylate-methacrylic acid-methyl methacrylate-polyethylene glycol dimethacrylate-trimethylolpropane triacrylate copolymer (as radiation-curable substrate for adhesive sheet in both wafer-supporting and die-attaching for fabrication of semiconductor device)
 IT 28347-97-9 36496-83-0 182681-56-7, Bis(4-amino-3,5-dimethylphenyl)methane-1,2-(ethylene)bis(trimellitate anhydride) copolymer 182681-58-9 210980-97-5 210980-98-6 (in adhesive layer of sheet for both wafer-supporting and die-attaching in fabrication of semiconductor device)

L32 ANSWER 18 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:686598 HCAPLUS

DOCUMENT NUMBER: 137:218065

TITLE: Adhesive sheet for both wafer-supporting and die-attaching in fabrication of semiconductor device

INVENTOR(S): Sugiura, Minoru; Hasegawa, Yuji; Aichi, Katsuhide; Masuko, Takashi

PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

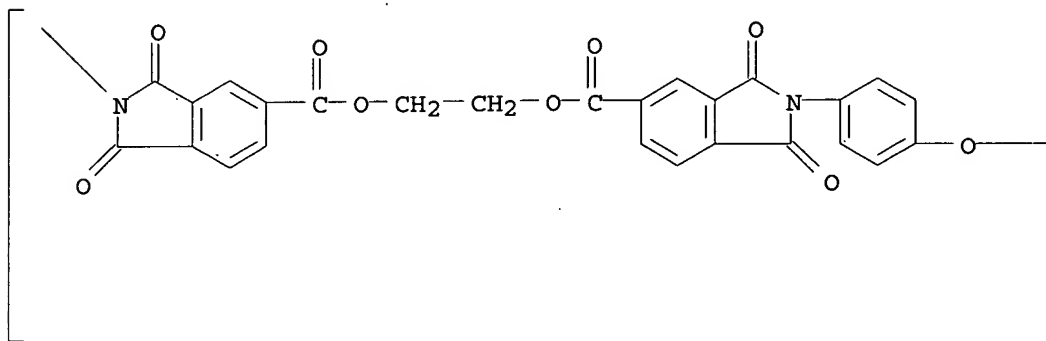
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

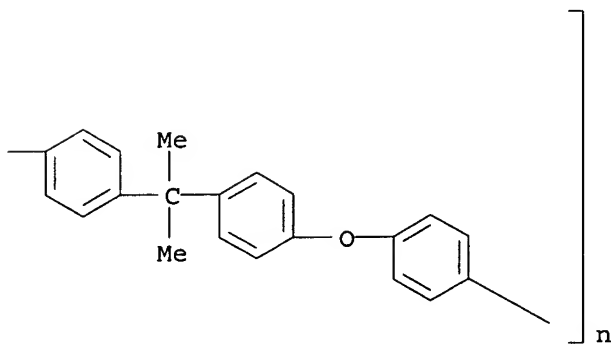
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|--------------|
| ----- | ---- | ----- | ----- | |
| JP 2002256236 | A2 | 20020911 | JP 2001-56732 | 2001 0301 |
| PRIORITY APPLN. INFO.: | | | | 2001 0301 |
| JP 2001-56732 | | | | |

- AB Title adhesive sheet is prepared by forming on a radiation-curable substrate an adhesive layer comprising (A) polyimides, (B) epoxy resins, (C) phenolic resins, and (D) crosslinking catalysts. Thus, a substrate, prepared from 100 parts of Bu methacrylate-methacrylic acid-Me methacrylate-2-ethylhexyl acrylate copolymer and 60 parts of trimethylolpropane triacrylate/polyethylene glycol dimethacrylate (20/10) mixture, was laminated with an adhesive layer prepared from 2,2-bis[4-(4-aminophenoxy)phenyl]propane-(ethylene)bis(trimellitate anhydride) copolymer 100, epoxy resin YDCN-702 50, phenolic resin H-1 24, crosslinking catalyst 2P4MHZ 0.5, silica 80, and dimethylacetamide 800 parts, to give an adhesive sheet.
- IT 146393-87-5
(in adhesive layer of sheet for both wafer-supporting and die-attaching in fabrication of semiconductor device)
- RN 146393-87-5 HCAPLUS
- CN Poly[(1,3-dihydro-1,3-dioxo-2H-isoindole-2,5-diyl)carbonyloxy-1,2-ethanediyloxycarbonyl(1,3-dihydro-1,3-dioxo-2H-isoindole-5,2-diyl)-1,4-phenyleneoxy-1,4-phenylene(1-methylethylidene)-1,4-phenyleneoxy-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



- IC ICM C09J007-02
- ICS C09J161-06; C09J163-00; C09J179-08; H01L021-52; H01L021-301

CC 38-3 (Plastics Fabrication and Uses)
 Section cross-reference(s): 76

IT 431879-23-1P, Butyl methacrylate-2-ethylhexyl acrylate-methacrylic acid-methyl methacrylate-polyethylene glycol dimethacrylate-trimethylolpropane triacrylate copolymer (as radiation-curable substrate for adhesive sheet in both wafer-supporting and die-attaching for fabrication of semiconductor device)

IT 146343-43-3, 2,2-Bis(4-(4-aminophenoxy)phenyl)propane-ethylenebis(trimellitate dianhydride) copolymer
 146393-87-5 161554-42-3, 1,3-Bis(3-aminopropyl)-tetramethyldisiloxane-4,4'-methylene-bis(2,6-diisopropylaniline-(tetramethylene)bis(trimellitate dianhydride) copolymer
 172028-43-2
 (in adhesive layer of sheet for both wafer-supporting and die-attaching in fabrication of semiconductor device)

L32 ANSWER 19 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:482701 HCAPLUS
 DOCUMENT NUMBER: 137:34588
 TITLE: Radiation-curable transparent conductive coating composition containing electroconductive polymer aqueous solutions and their transparent conductive films

INVENTOR(S): Kim, Num Fun
 PATENT ASSIGNEE(S): Deha Manteku Company Ltd., S. Korea
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF

DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------------|
| JP 2002179954 | A2 | 20020626 | JP 2001-311858 | 2001 1009 |
| KR 2001069254 | A | 20010725 | KR 2000-59432 | 2000 1010 |
| PRIORITY APPLN. INFO.: | | | KR 2000-59432 | A 2000 1010 |

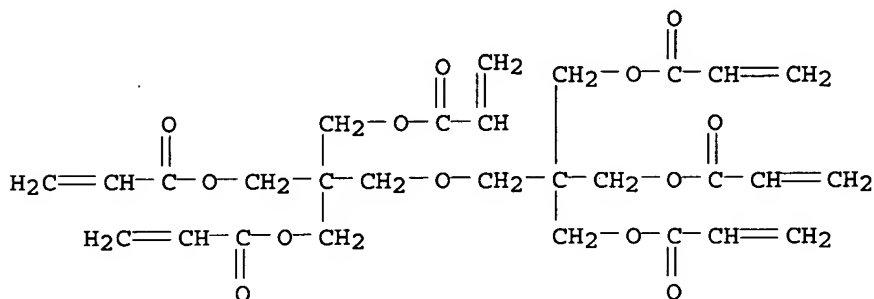
AB The composition without using conductive oxide as the conductive substance, useful for electromagnetic wave shielding films, antistatic films and electroluminescent clear electrodes, comprises a electroconductive polymer aqueous solution, a photoinitiator, a binder containing acrylic oligomer or monomer, and an ether or alc. solvent for dissolving the electroconductive polymer, the photoinitiator and the binder. Thus, 25 parts binder containing dipentaerythritol hexaacrylate 45 pentaerythritol triacrylate 20 and N-vinylpyrrolidone 10 parts was mixed with 1.3% aqueous solution of polyethylenedioxythiophene and polystyrenesulfonate 15.5, α -hydroxycyclohexylphenylmethanone 0.2 and iso-Pr alc. 45 ethylene glycol monoethyl ether 27.5 parts, evaporated to remove the solvent and photocured to give a film showing surface resistance $2 \times 10^6 \Omega/\text{box.}$, transmittance

IT 224644-14-8 437711-66-5

RN 224644-14-8 HCAPLUS

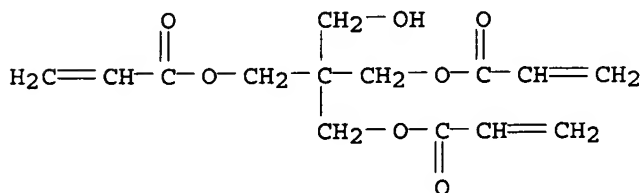
CM 1

CMF C28 H34 O13



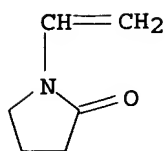
CM 2

CMF C14 H18 O7



CM 3

CMF C6 H9 N O

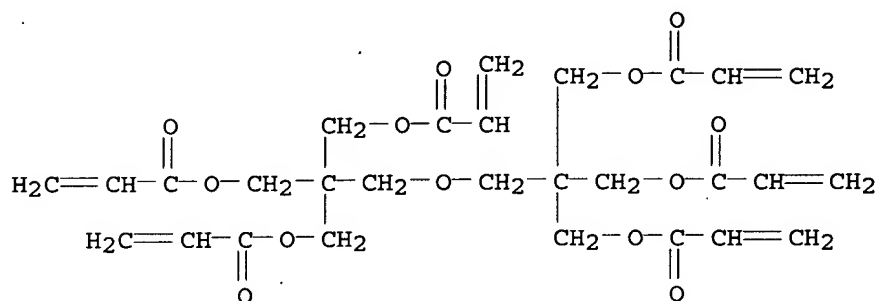


| | | | |
|----|---|---------|--|
| RN | 437711-66-5 | HCAPLUS | |
| CN | 2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 1-ethenyl-2-pyrrolidinone and 2-[[[3-[[[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME) | | |

CM 1

CRN 29570-58-9

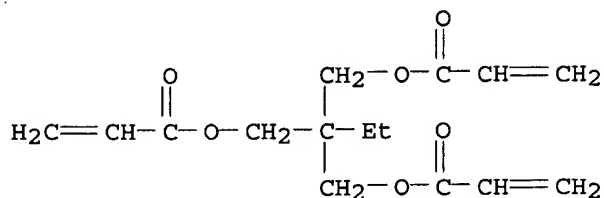
CMF C28 H34 O13



CM 2

CRN 15625-89-5

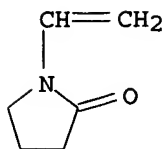
CMF C15 H20 O6



CM 3

CRN 88-12-0

C6H9NO



IC ICM C09D005-24
 ICS C09D004-02; C09D005-00; C09D179-00; C09D179-04; C09D181-00;
 H01B005-14
 CC 42-10 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 76
 IT 224644-14-8 232946-28-0 437711-66-5
 (binder; radiation-curable transparent conductive coating
 composition containing electroconductive polymer aqueous solns. for
 transparent conductive films)

L32 ANSWER 20 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2002:439119 HCAPLUS
 DOCUMENT NUMBER: 137:21065
 TITLE: Electrically conductive polymer compositions
 with uniform resistivity and high
 voltage-resistance dependence
 INVENTOR(S): Yoshikawa, Hitoshi; Suzuki, Satoshi; Ito,
 Kunio
 PATENT ASSIGNEE(S): Tokai Rubber Industries, Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------------|
| JP 2002167519 | A2 | 20020611 | JP 2001-252690 | 2001 0823 |
| PRIORITY APPLN. INFO.: | | | JP 2000-284068 | A 2000 0919 |

AB The compns., useful for electrophotog. components, contain (A)
 elec. conductive polymers having surfactant structures and (B)
 binder polymers. Thus, 10 parts aniline and 8 parts
 dodecylbenzenesulfonic acid were oxidation-polymerized to give an elec.
 conductive polymer, which was blended with 82 parts poly(Me
 methacrylate) and extruded on a glass plate to give a 100- μ m
 elec. conductive film with elec. resistivity 1.5×10^6
 Ω -cm and high resistivity dependence on temperature, humidity, and
 voltage.
 IT 433731-72-7P 433731-73-8P
 (elec. conductive polymer compns. containing conductive polymers
 having surfactant structure with uniform resistivity and high
 voltage-resistance dependence)
 RN 433731-72-7 HCAPLUS
 CN Benzenesulfonic acid, dodecyl-, polymer with 1H-pyrrole (9CI) (CA
 INDEX NAME)

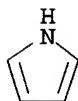
CM 1

CRN 27176-87-0
CMF C18 H30 O3 S
CCI IDS

D1-SO₃HMe-(CH₂)₁₁-D1

CM 2

CRN 109-97-7
CMF C4 H5 N



RN 433731-73-8 HCAPLUS
CN Benzenesulfonic acid, dodecyl-, polymer with thiophene (9CI) (CA
INDEX NAME)

CM 1

CRN 27176-87-0
CMF C18 H30 O3 S
CCI IDS

D1-SO₃HMe-(CH₂)₁₁-D1

CM 2

CRN 110-02-1
CMF C4 H4 S



IC ICM C08L101-12
ICS C08K003-00; C08L101-00; F16C013-00; G03G015-00; G03G015-02;
G03G015-08; G03G015-16; G03G021-06; G03G021-10
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 42, 76
IT **Nitrile** rubber, uses
(hydrogenated, Zetpol 0020, binder; elec. conductive polymer
compns. containing conductive polymers having surfactant structure
with uniform resistivity and high voltage-resistance
dependence)
IT 132512-01-7P, Aniline-dodecylbenzenesulfonic acid copolymer
433731-72-7P 433731-73-8P
(elec. conductive polymer compns. containing conductive polymers
having surfactant structure with uniform resistivity and high
voltage-resistance dependence)
IT 9003-18-3
(**nitrile** rubber, hydrogenated, Zetpol 0020, binder;
elec. conductive polymer compns. containing conductive polymers
having surfactant structure with uniform resistivity and high
voltage-resistance dependence)

L32 ANSWER 21 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:378604 HCAPLUS
DOCUMENT NUMBER: 136:387498
TITLE: Thermosetting resin **compositions** for
antifogging and waterproof coatings
INVENTOR(S): Nakata, Yoshitomo; Wakao, Norihiro;
Nishibayashi, Hideyuki
PATENT ASSIGNEE(S): Nippon Shokubai Kagaku Kogyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------------------------------|------|----------|-----------------|--------------|
| ----- | ---- | ----- | ----- | |
| JP 2002146273 | A2 | 20020522 | JP 2000-344484 | 2000 1110 |
| PRIORITY APPLN. INFO.: JP 2000-344484 | | | | 2000 1110 |

AB Title thermally self-crosslinkable **compns.** contain
N-vinylpyrrolidone (I)-based resins with I content of $\geq 60\%$
(based on total resins). A **composition** containing PVP K 30 was
spread on a glass plate to a 30- μm thickness and baked at

200° for 20 min to form a film good antifogging ability and no scratches after rubbing with water-wet cottons over 30 times.

IT 426820-12-4P, Acrylic acid

-N-vinyl-2-pyrrolidone-Neopentyl glycol diglycidyl ether copolymer

(thermally self-crosslinkable N-vinylpyrrolidone resin compns. for antifogging and waterproof coatings)

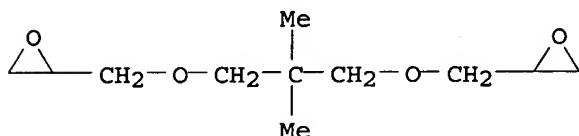
RN 426820-12-4 HCAPLUS

CN 2-Propenoic acid, polymer with 2,2'-[(2,2-dimethyl-1,3-propanediyl)bis(oxymethylene)]bis[oxirane] and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 17557-23-2

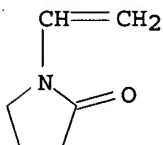
CMF C11 H20 O4



CM 2

CRN 88-12-0

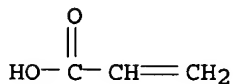
CMF C6 H9 N O



CM 3

CRN 79-10-7

CMF C3 H4 O2



IC ICM C09D139-06

ICS C09D005-00

CC 42-10 (Coatings, Inks, and Related Products)

IT Antifogging agents

(coatings; thermally self-crosslinkable N-vinylpyrrolidone resin compns. for antifogging and waterproof coatings)

IT Polyoxyalkylenes, uses

(thermally self-crosslinkable N-vinylpyrrolidone resin

compns. for antifogging and waterproof coatings)
 IT Coating materials
 (water-resistant; thermally self-crosslinkable
 N-vinylpyrrolidone resin compns. for antifogging and
 waterproof coatings)
 IT 185919-07-7P, Octene-N-vinyl-2-pyrrolidone copolymer
 426820-12-4P, Acrylic acid
 -N-vinyl-2-pyrrolidone-Neopentyl glycol diglycidyl ether
 copolymer
 (thermally self-crosslinkable N-vinylpyrrolidone resin
 compns. for antifogging and waterproof coatings)
 IT 9003-54-7, AS 70 25322-68-3, Alkox R 400
 (thermally self-crosslinkable N-vinylpyrrolidone resin
 compns. for antifogging and waterproof coatings)
 IT 9003-39-8, PVP K 30
 (thermally self-crosslinkable N-vinylpyrrolidone resin
 compns. for antifogging and waterproof coatings)

L32 ANSWER 22 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2002:364271 HCAPLUS
 DOCUMENT NUMBER: 136:378259
 TITLE: Electrically conducting polymer compositions
 and flexible conductor films with excellent
 transparency
 INVENTOR(S): Uzawa, Masashi; Saito, Takashi
 PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|--------------|
| ----- | ---- | ----- | ----- | |
| JP 2002140930 | A2 | 20020517 | JP 2000-334720 | 2000 1101 |

PRIORITY APPLN. INFO.: JP 2000-334720
 2000
 1101

AB The compns., especially useful for antistatic agents for packaging
 materials, magnetic tapes, films, etc., contain water-soluble
 conducting polymers (A) bearing sulfonic acid and/or carboxyl
 groups, vinyl polymer emulsions (B) having glass-transition temperature
 ≤40°, solvents (C), and optionally surfactants (D).

IT 114815-75-7
 (water-soluble conducting polymer compns. for flexible conductor
 films with good transparency and antistaticity)

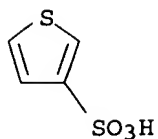
RN 114815-75-7 HCAPLUS

CN 3-Thiophenesulfonic acid, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 113282-83-0

CMF C4 H4 O3 S2



IC ICM H01B001-20
 ICS C08F002-44; C08F265-02; C08L029-04; C08L051-00; C08L065-00;
 C08L071-02; C08L079-00; C08L101-00; C08L101-14; H01B001-12;
 H01B005-14
 CC 76-2 (**Electric** Phenomena)
 Section cross-reference(s): 38
 IT 9002-89-5D, Poly(vinyl alcohol), modified 143710-17-2,
 PVA-MP 103
 (water-soluble conducting polymer compns. for flexible conductor
 films with good transparency and antistaticity)
 IT 114815-75-7 117116-75-3 152070-83-2
 (water-soluble conducting polymer compns. for flexible conductor
 films with good transparency and antistaticity)

L32 ANSWER 23 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:51556 HCAPLUS
 DOCUMENT NUMBER: 136:103907
 TITLE: Water-washable, water-soluble and
 heat-resistant coatings for solder-resist mask
 INVENTOR(S): Lam, Vu V.; Cantor, Stephen E.; Bachmann,
 Andrew G.
 PATENT ASSIGNEE(S): Dymax Corporation, USA
 SOURCE: PCT Int. Appl., 17 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|--------------|
| WO 2002004549 | A1 | 20020117 | WO 2001-US40761 | 2001 0518 |

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN,
 CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
 ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
 LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO,
 RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ,
 VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE,
 CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
 PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR,
 NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-613884 A
 2000
 0711

AB A formulation for producing highly water-soluble, water-washable and
 heat-resistant coating comprises (1) ≥ 1 polymerizable
 ingredient 20, such as N-vinyl-2-pyrrolidone, to produce a
 water-soluble solid, (2) a carbohydrate 2-40, such as sorbitol,

cyclodextrin, fructose, xylose or starch, (3) ≥ 1 water-soluble ingredient 25-95 parts, such as poly(ethylene glycol), for controlling the rheol. and phys. stability of the formulation. The coating is especially suitable for use as a solder-resist mask.

IT 25086-89-9, Vinylpyrrolidone-vinyl acetate copolymer
(water-washable and heat-resistant coating comprising polymerizable solid ingredients, carbohydrates and water-soluble components)

RN 25086-89-9 HCAPLUS

CN Acetic acid ethenyl ester, polymer with 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 108-05-4

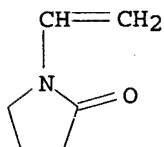
CMF C4 H6 O2

AcO-CH=CH₂

CM 2

CRN 88-12-0

CMF C6 H9 N O



IC ICM C08J005-10
ICS C08L003-00; C08L089-00

CC 42-3 (Coatings, Inks, and Related Products)
Section cross-reference(s): 44, 76

IT 9003-39-8, Polyvinylpyrrolidone 9011-16-9, Methyl vinyl ether-maleic anhydride copolymer 25086-89-9, Vinylpyrrolidone-vinyl acetate copolymer 25322-68-3, Polyethylene oxide 25322-69-4, Poly(propylene glycol) 25805-17-8, Poly(2-ethyl-2-oxazoline)
(water-washable and heat-resistant coating comprising polymerizable solid ingredients, carbohydrates and water-soluble components)

IT 50-70-4, Sorbitol, uses 56-81-5, Glycerine, uses 56-82-6, Glyceraldehyde 57-48-7, Fructose, uses 57-50-1, Sucrose, uses 57-55-6, Propylene glycol, uses 63-42-3, Lactose 69-79-4, Maltose 87-79-6, Sorbose 3458-28-4, Mannose 7585-39-9, β -Cyclodextrin 9005-25-8, Starch, uses 25990-60-7, Xylose
(water-washable and heat-resistant coating comprising polymerizable solid ingredients, carbohydrates and water-soluble components)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 24 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2002:35841 HCAPLUS
 DOCUMENT NUMBER: 136:103176
 TITLE: Photo-sensitive polybenzoxazole precursor
 resins and alkali-developable compositions
 useful for lithographic patterning containing
 them
 INVENTOR(S): Kaneda, Takayuki; Kimura, Masashi; Kanaya,
 Ryuichiro
 PATENT ASSIGNEE(S): Asahi Chemical Industry Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------------|
| JP 2002012665 | A2 | 20020115 | JP 2000-335097 | 2000 1101 |
| PRIORITY APPLN. INFO.: | | | JP 2000-130480 | A 2000 0428 |

AB The resins are obtained from the reaction products of a polyamide bearing OH groups partially with OCN(CH₂)_mOCOC(R₁):CR₂R₃ (R₁-3 = H, C1-3 aliphatic groups; m = 2-10), and used in compns. containing photoinitiators, crosslinkers and diluents for neg.-working photoresists in patterning of semiconductor devices. Thus, condensing 2,2-bis(3-amino-4-hydroxyphenyl)hexafluoropropane with 4,4'-diphenyl ether dicarboxylic acid dichloride, end-blocking the resulting polyamide with phthalic anhydride, purifying, and reacting the blocked product with 2-isocyanatoethyl methacrylate (at an amount equivalent to 40 mol% of OH groups on the product) gave a polybenzoxazole precursor 100 parts of which was combined with tetraethylene glycol dimethacrylate 40, 1-phenyl-propanedione-2-(o-benzoyl) oxime 6, Michler's ketone 2, 3-aminopropyltrimethoxysilane 6, N-nitrosodiphenylamine 0.1 and N-methyl-2-pyrrolidone 230 parts to give a neg.-working photoresist with good light curability and developing property by alkali.

IT 389104-86-3P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, terminated with 5-norbornene-2,3-dicarboxylic anhydride, carbamate ester with 2-isocyanatoethyl methacrylate
 (photo-sensitive polybenzoxazole precursor resins and alkali-developable compns. useful for lithog. patterning containing them)

RN 389104-86-3 HCAPLUS

CN Poly[oxy-1,4-phenylenecarbonylimino(6-hydroxy-1,3-phenylene) [2,2,2-trifluoro-1-(trifluoromethyl)ethylidene] (4-hydroxy-1,3-phenylene)iminocarbonyl-1,4-phenylene], α-[4-[[[3-[2,2,2-trifluoro-1-[3-(1,3,3a,4,7,7a-hexahydro-1,3-dioxo-4,7-methano-2H-isoindol-2-yl)-4-hydroxyphenyl]-1-(trifluoromethyl)ethyl]-6-hydroxyphenyl]amino]carbonyl]phenyl]-ω-[4-[[[3-[2,2,2-trifluoro-1-[3-(1,3,3a,4,7,7a-hexahydro-1,3-dioxo-4,7-methano-2H-

isoindol-2-yl)-4-hydroxyphenyl]-1-(trifluoromethyl)ethyl]-6-hydroxyphenyl]amino]carbonyl]phenoxy]-, [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate (9CI) (CA INDEX NAME)

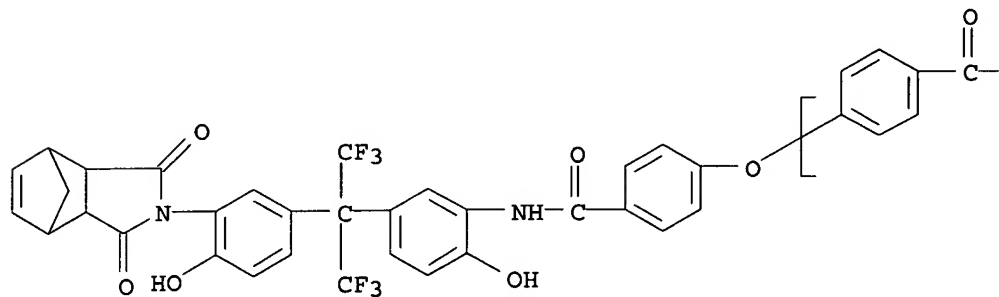
CM 1

CRN 389077-97-8

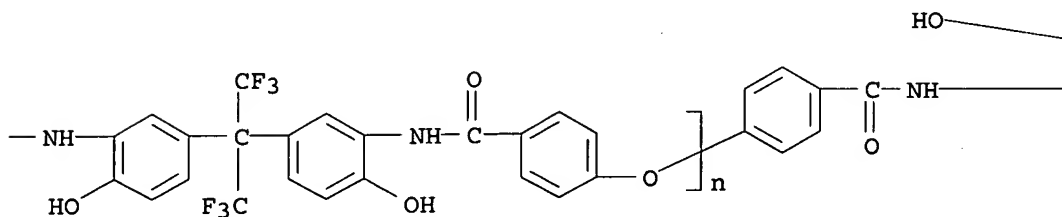
CMF (C29 H18 F6 N2 O5)n C62 H42 F12 N4 O11

CCI PMS

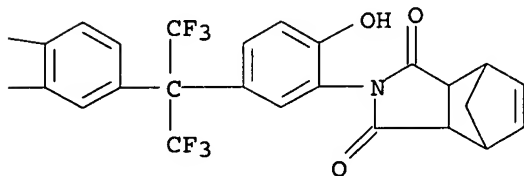
PAGE 1-A



PAGE 1-B



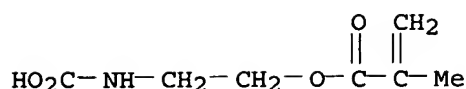
PAGE 1-C



CM 2

CRN 96571-20-9

CMF C7 H11 N O4



- IC ICM C08G073-22
ICS C08K005-00; C08L079-06; G03F007-038; G03F007-40; H01L021-027
- CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 74, 76
- IT 389104-92-1DP, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer 2-isocyanatoethyl methacrylate ester-tetraethylene glycol dimethacrylate copolymer, reaction products with termination acids 389104-92-1P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer 2-isocyanatoethyl methacrylate ester-tetraethylene glycol dimethacrylate copolymer 389104-93-2DP, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer 2-isocyanatoethyl methacrylate ester-N,N'-di(2-methacryloxyethyl)urea copolymer, reaction products with termination acids 389104-94-3P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer 2-isocyanatoethyl methacrylate ester-N,N'-di(2-methacryloxyethyl)urea-tetraethylene glycol dimethacrylate copolymer (photo-sensitive polybenzoxazole precursor resins and alkali-developable compns. useful for lithog. patterning containing them)
- IT 389104-83-0P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, phthalic anhydride-terminated, ester with 2-isocyanatoethyl methacrylate 389104-84-1P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, terminated with methanesulfonyl chloride, carbamate ester with 2-isocyanatoethyl methacrylate 389104-85-2P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, terminated with p-toluenesulfonyl chloride, carbamate ester with 2-isocyanatoethyl methacrylate 389104-86-3P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, terminated with 5-norbornene-2,3-dicarboxylic anhydride, carbamate ester with 2-isocyanatoethyl methacrylate 389104-87-4P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, terminated with glutaric anhydride, carbamate ester with 2-isocyanatoethyl methacrylate 389104-89-6P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, terminated with di-tert-butyl carbonate, carbamate ester with 2-isocyanatoethyl methacrylate 389104-90-9P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, carbamate ester with 2-isocyanatoethyl methacrylate 389104-95-4P, 2,2-Bis(3-amino-4-hydroxyphenyl)hexafluoropropane-4,4'-diphenyl ether dicarboxylic acid dichloride copolymer polyamide sru, terminated with cyclohexane-1,2-dicarboxylic anhydride, carbamate ester with 2-isocyanatoethyl methacrylate

(photo-sensitive polybenzoxazole precursor resins and alkali-developable compns. useful for lithog. patterning containing them)

L32 ANSWER 25 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:762831 HCAPLUS

DOCUMENT NUMBER: 135:308921

TITLE: **Compositions** containing alcohols and fatty acids for use as penetration promoters in transdermal formulations for highly lipophilic active ingredients

INVENTOR(S): Lipp, Ralph; Funke, Adrian; Guenther, Clemens

PATENT ASSIGNEE(S): Schering Aktiengesellschaft, Germany

SOURCE: PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|--------------|
| WO 2001076608 | A1 | 20011018 | WO 2001-EP3896 | 2001 0405 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| DE 10019171 | A1 | 20011018 | DE 2000-10019171 | 2000 0407 |
| EP 1267884 | A1 | 20030102 | EP 2001-933793 | 2001 0405 |
| EP 1267884 | B1 | 20041013 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| JP 2003530354 | T2 | 20031014 | JP 2001-574124 | 2001 0405 |
| AT 279199 | E | 20041015 | AT 2001-933793 | 2001 0405 |
| NO 2002004796 | A | 20021206 | NO 2002-4796 | 2002 1004 |
| US 2003157155 | A1 | 20030821 | US 2003-240825 | 2003 0407 |
| PRIORITY APPLN. INFO.: | | | DE 2000-10019171 | A 2000 |

0407

WO 2001-EP3896

W

2001
0405

AB A composition for use as penetration promoter in transdermal formulations for highly lipophilic active ingredients or active ingredient combinations, which comprises at least a first and a second penetration promoter, where the first penetration promoter is a monohydric or polyhydric alc., and the second penetration promoter is a saturated or unsatd. fatty acid having 8 to 18 carbon atoms or an ester or derivative thereof. For example, a matrix transdermal systems of antiestrogen was prepared A solution of 1 g of antiestrogen, 11R-fluoro-7 α -{5-[N-methyl-N-3-(4,4,5,5,5-pentafluoropentylthio)propylamino]pentyl}estra-1,3,5(10)-triene-3,17,13-diol, 1 g of lauric acid and 0.4 g of hydroxypropyl cellulose in 7.1 g of Et acetate was introduced into 7.2 g of a 50% strength solution of vinyl acetate/acrylate copolymer (e.g. Gelva Multipolymer Solution type 2723 or 7883 from Solutia, formerly Monsanto) in Et acetate and stirred until dissoln. was complete. Then 4 g of 1,2-propanediol was added and processed to a clearly transparent mixture The mixture obtained was applied to a fluoropolymer-coated detachable layer, e.g. Scotchpak 1022 from 3 M. At 70°, Et acetate was completely removed, and 1,2-propanediol was removed to a desired remaining content of about 30% of the matrix weight This was followed by lamination with a backing layer, e.g., CoTran polyethylene film from 3M. The laminate obtained in this way was divided by means of a punch device into circular individual plasters and packed in aluminum foil. The result was plasters which are microscopically free of crystals and have suitable adhesive properties and contain 10.4% antiestrogen, 10.1% lauric acid and 31.3% 1,2-propanediol based on the matrix weight

IT 28062-44-4, Acrylic acid
-vinylpyrrolidone copolymer
(comps. containing alcs. and fatty acids for
use as penetration promoters in transdermal formulations for
highly lipophilic active ingredients)

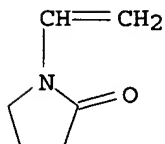
RN 28062-44-4 HCAPLUS

CN 2-Propenoic acid, polymer with 1-ethenyl-2-pyrrolidinone (9CI)
(CA INDEX NAME)

CM 1

CRN 88-12-0

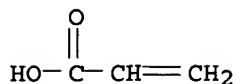
CMF C6 H9 N O



CM 2

CRN 79-10-7

CMF C3 H4 O2



- IC ICM A61K031-565
ICS A61K047-10; A61K047-12; A61K009-70
- CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1
- IT Fatty acids, biological studies
(C8-18; **compns.** containing alcs. and fatty acids for use as penetration promoters in transdermal formulations for highly lipophilic active ingredients)
- IT Estrogens
(antiestrogens; **compns.** containing alcs. and fatty acids for use as penetration promoters in transdermal formulations for highly lipophilic active ingredients)
- IT Permeation enhancers
Skin
(**compns.** containing alcs. and fatty acids for use as penetration promoters in transdermal formulations for highly lipophilic active ingredients)
- IT Alcohols, biological studies
(**compns.** containing alcs. and fatty acids for use as penetration promoters in transdermal formulations for highly lipophilic active ingredients)
- IT Isobutylene rubber
Silicone rubber, biological studies
Steroids, biological studies
(**compns.** containing alcs. and fatty acids for use as penetration promoters in transdermal formulations for highly lipophilic active ingredients)
- IT Fatty acids, biological studies
(esters, C8-18; **compns.** containing alcs. and fatty acids for use as penetration promoters in transdermal formulations for highly lipophilic active ingredients)
- IT Biological transport
(permeation; **compns.** containing alcs. and fatty acids for use as penetration promoters in transdermal formulations for highly lipophilic active ingredients)
- IT Alcohols, biological studies
(polyhydric; **compns.** containing alcs. and fatty acids for use as penetration promoters in transdermal formulations for highly lipophilic active ingredients)
- IT Drug delivery systems
(transdermal; **compns.** containing alcs. and fatty acids for use as penetration promoters in transdermal formulations for highly lipophilic active ingredients)
- IT Fatty acids, biological studies
(unsatd., C8-18; **compns.** containing alcs. and fatty acids for use as penetration promoters in transdermal formulations for highly lipophilic active ingredients)
- IT 57-55-6, 1,2-Propanediol, biological studies 67-68-5, DMSO, biological studies 143-07-7, Lauric acid, biological studies 143-07-7D, Lauric acid, esters 5306-85-4, Dimethylisosorbide
(**compns.** containing alcs. and fatty acids for use as penetration promoters in transdermal formulations for highly

lipophilic active ingredients)

IT 9003-01-4, Poly(acrylic acid) 9004-64-2, Hydroxypropyl cellulose
 24980-58-3, Acrylic acid-vinyl acetate copolymer 27234-90-8,
 2-Ethylhexyl acrylate-N-vinyl-2-pyrrolidone copolymer
 28062-44-4, **Acrylic acid**
 -vinylpyrrolidone copolymer 204137-41-7 228567-45-1
 (compns. containing alcs. and fatty acids for
 use as penetration promoters in transdermal formulations for
 highly lipophilic active ingredients)

IT 9003-27-4
 (isobutylene rubber, compns. containing alcs. and fatty
 acids for use as penetration promoters in transdermal
 formulations for highly lipophilic active ingredients)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE
 FOR THIS RECORD. ALL CITATIONS AVAILABLE
 IN THE RE FORMAT

L32 ANSWER 26 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:414613 HCAPLUS

DOCUMENT NUMBER: 135:20666

TITLE: Radiation-curable resin compositions for the
 manufacture of color liquid-crystal display
 devices

INVENTOR(S): Nagatsuka, Tomio; Abe, Megumi

PATENT ASSIGNEE(S): JSR Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------------|
| JP 2001154013 | A2 | 20010608 | JP 1999-341976 | 1999 1201 |
| SG 85221 | A1 | 20011219 | SG 2000-7088 | 2000 1129 |
| PRIORITY APPLN. INFO.: | | | JP 1999-341976 | A 1999 1201 |
| | | | JP 2000-26031 | A 2000 0203 |
| | | | JP 2000-139829 | A 2000 0512 |
| | | | JP 2000-143900 | A 2000 0516 |
| | | | JP 2000-303192 | A 2000 1003 |

AB The compns. which can be developed with great precision and used as color filters on base boards powered by thin-film transistors with good adhesion to passivation film, comprise (A) colorants, (B) alkali-soluble resins, (C) polyfunctional monomers, and (D) photoinitiators. Thus, mixing 100 parts a 65:35 mixture of C.I. Pigment Red 177 (pigment) and C.I. Pigment Red 224 (pigment) with a benzyl methacrylate-glycerol monomethacrylate-N-phenylmaleimide-methacrylic acid-styrene copolymer 70, dipentaerythritol hexaacrylate 80, 2-benzyl-2-dimethylamino-1-(4-morpholinophenyl)butanone-1 50 and propylene glycol monomethyl acetate 1000 parts gave a radiation-curable composition

IT 262445-63-6P, Benzyl methacrylate-dipentaerythritol hexaacrylate-glycerol monomethacrylate-N-phenylmaleimide-methacrylic acid-styrene copolymer
(color filter; radiation-curable resin compns. for manufacture of color liquid-crystal display devices)

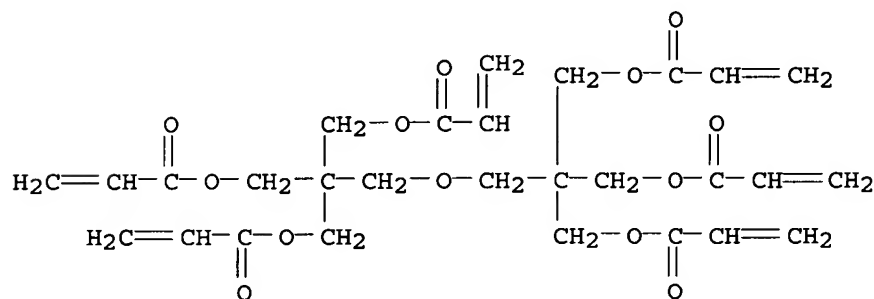
RN 262445-63-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, 2-[[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, phenylmethyl 2-methyl-2-propenoate, 1-phenyl-1H-pyrrole-2,5-dione and 1,2,3-propanetriol mono(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 29570-58-9

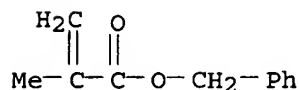
CMF C28 H34 O13



CM 2

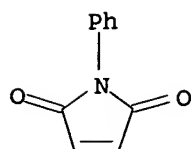
CRN 2495-37-6

CMF C11 H12 O2



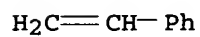
CM 3

CRN 941-69-5
CMF C10 H7 N O2



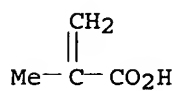
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CRN 100-42-5
CMF C8 H8



CM 5

CRN 79-41-4
CMF C4 H6 O2

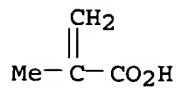


CM 6

CRN 50853-28-6
CMF C7 H12 O4
CCI IDS

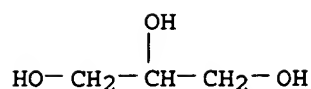
CM 7

CRN 79-41-4
CMF C4 H6 O2



CM 8

CRN 56-81-5
CMF C3 H8 O3



IC ICM G02B005-20
ICS C08F002-48; G02F001-1335; G03F007-028
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 76
IT 236095-61-7P, Benzyl methacrylate-dipentaerythritol
hexaacrylate-2-hydroxyethyl methacrylate-methacrylic acid
copolymer 262445-63-6P, Benzyl methacrylate-
dipentaerythritol hexaacrylate-glycerol monomethacrylate-N-
phenylmaleimide-methacrylic acid-styrene copolymer
(color filter; radiation-curable resin compns. for manufacture of
color liquid-crystal display devices)

L32 ANSWER 27 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:290939 HCAPLUS
DOCUMENT NUMBER: 134:312577
TITLE: Electrically conductive coating materials
having good coatability
INVENTOR(S): Usawa, Masashi; Maeda, Shinichi; Saito,
Takashi
PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|--------------|
| JP 2001115098 | A2 | 20010424 | JP 1999-295912 | 1999 1018 |
| PRIORITY APPLN. INFO.: | | | JP 1999-295912 | 1999 1018 |

AB Coating materials contain water-soluble elec. conductive polymers
having sulfonic acid and/or carboxylic acid groups,
alkyl-terminated poly(vinyl alc.), and solvents. Thus,
a solution containing poly(2-aminoanisoie-4-sulfonic acid) 3, MP 103 0.5,
and water 100 parts was coated on Al.

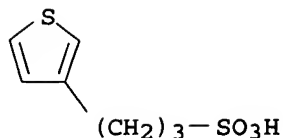
IT 135899-67-1
(coating materials containing elec. conductive polymers and
alkyl-terminated poly(vinyl alc.) having good
coatability)

RN 135899-67-1 HCAPLUS

CN 3-Thiophenepropanesulfonic acid, homopolymer (9CI) (CA INDEX
NAME)

CM 1

CRN 135899-66-0
CMF C7 H10 O3 S2



IC ICM C09D201-02
 ICS C09D005-24; C09D129-04; H01B001-20; H01B005-14
 CC 42-10 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 76
 ST polyaminoanisolesulfonic acid polyvinyl alc elec
 conductor coating
 IT Conducting polymers
 (coating materials containing elec. conductive polymers and
 alkyl-terminated poly(vinyl alc.) having good
 coatability)
 IT Coating materials
 (elec. conductive; coating materials containing elec. conductive
 polymers and alkyl-terminated poly(vinyl alc.) having
 good coatability)
 IT 9002-89-5D, Poly(vinyl alcohol), alkyl-terminated
 143710-17-2, MP 103 (vinyl alcohol polymer)
 (coating materials containing elec. conductive polymers and
 alkyl-terminated poly(vinyl alc.) having good
 coatability)
 IT 117116-75-3, Poly[imino(2-sulfo-1,4-phenylene)] 117116-75-3
 135899-67-1 141182-89-0 152070-83-2 167860-86-8
 (coating materials containing elec. conductive polymers and
 alkyl-terminated poly(vinyl alc.) having good
 coatability)

L32 ANSWER 28 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:133373 HCAPLUS

DOCUMENT NUMBER: 135:20345

TITLE: Synthesis, chemical polymerization and
 electrochemical properties of low band gap
 conducting polymers for use in super
 capacitors

AUTHOR(S): Soudan, Patrick; Lucas, Philippe; Ho, Hoang
 Ang; Jobin, Donald; Breau, Livain; Belanger,
 Daniel

CORPORATE SOURCE: Laboratoire d'Electrochimie Appliquee,
 Departement de Chimie, Universite du Quebec a
 Montreal, Centre-Ville, Montreal, QC, H3C 3P8,
 Can.

SOURCE: Journal of Materials Chemistry (2001), 11(3),
 773-782

CODEN: JMACEP; ISSN: 0959-9428

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

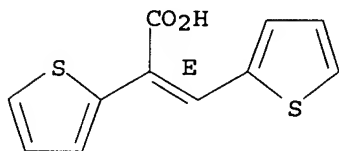
LANGUAGE: English

AB A set of nine monomers derived from diaryl-cyano vinylene,
 -carboxy vinylene and -cyanobutadiene were synthesized as were the
 corresponding polymers resulting from the chemical polymerization of the
 monomers in the presence of an almost quant. amount of FeCl₃ in
 chloroform. The aim of this work was to investigate the effect of
 the chemical structure of the polymers on their charge capacitance

and stability upon galvanostatic charge/discharge cycling. The electrochem. performances of composite electrodes based on polymer, acetylene black and PTFE have been investigated in acetonitrile containing 1 M Et₄NBF₄ using cyclic voltammetry and galvanostatic charge/discharge cycling expts. The best performances in terms of charge capacitance for both the p- and n-doping processes were demonstrated with poly(7) (2E,4E)-2,5-di-2-thienyl penta-2,4-diene **nitrile** and poly(9) (2E)-3-(2,2'-bithienyl-5-yl)-2-(2-thienyl)prop-2-ene **nitrile** since values as high as 245 C g⁻¹ were obtained with poly(7) in its n-doped state and 325 C g⁻¹ with p-doped poly(9). The energy d. (68 Wh kg⁻¹) and power d. (24 kW kg⁻¹) delivered by a poly(9) capacitor are in good agreement with those expected from cyclic voltammetry and galvanostatic charge/discharge expts. performed with single electrodes. Unfortunately, a capacitance loss was observed upon cycling and was ascribed exclusively to the n-doping process occurring at the neg. electrode since the capacitance of the pos. electrode remained almost unchanged during these expts.

IT 341548-63-8P
 (synthesis, chemical polymerization and electrochem. properties of low band gap conducting polymers for use in super capacitors)
 RN 341548-63-8 HCAPLUS
 CN 2-Thiopheneacetic acid, α -(2-thienylmethylene)-, (E)-, homopolymer (9CI) (CA INDEX NAME)
 CM 1
 CRN 716-34-7
 CMF C11 H8 O2 S2

Double bond geometry as shown.



CC 37-6 (Plastics Manufacture and Processing)
 Section cross-reference(s): 35, 76
 IT 171089-43-3P 171089-45-5P 341548-61-6P 341548-62-7P
 341548-63-8P 341548-64-9P 341548-65-0P 341548-66-1P
 342622-58-6P
 (synthesis, chemical polymerization and electrochem. properties of low band gap conducting polymers for use in super capacitors)
 REFERENCE COUNT: 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 29 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2001:106474 HCAPLUS
 DOCUMENT NUMBER: 134:164547
 TITLE: Polyester-based electrically insulating coatings
 INVENTOR(S): Yagita, Takashi; Ikeda, Masao; Terada, Setsuo
 PATENT ASSIGNEE(S): Dainichi Seika Kogyo K. K., Japan; Ukima Gosei K. K.

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|--------------|
| JP 2001040282 | A2 | 20010213 | JP 1999-211246 | 1999 0726 |

PRIORITY APPLN. INFO.: JP 1999-211246

1999
0726

AB Title coatings, with good heat and moisture resistance, contain organic solvent-soluble polyesters prepared from (A) acid components comprising >10 equiv% 2,6-naphthalene diacid (derivs.) and <90 equiv% terephthalic acid (derivs.), trimellitic anhydride (I) (derivs.), and/or diimidodiacids from I and 4,4'-diaminodiphenylmethane and (B) **alcs.** containing C2-8 aliphatic polyhydric **alcs.** at 1.2-2.0:1 equiv ratio of B/A. A Cu wire was coated with a xylene solution containing Ti(OBu)₄ and di-Me 2,6-naphthalene dicarboxylate-ethylene **glycol**-glycerol copolymer to a 0.018-mm thickness to form an insulated wire showing good hot moisture resistance (JIS C 3003) and 460° soldering peelability 5.0 s.

IT 325170-23-8P, 4,4'-Bis(N-trimellitide)diphenylmethane-dimethyl 2,6-naphthalenedicarboxylate-dimethyl terephthalate-ethylene **glycol**-glycerol copolymer (2,6-naphthalene diacid- and aliphatic polyol-based polyester-containing elec. insulating coatings with easy soldering peelability)

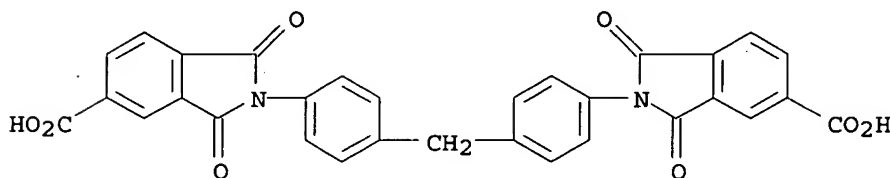
RN 325170-23-8 HCAPLUS

CN 2,6-Naphthalenedicarboxylic acid, dimethyl ester, polymer with dimethyl 1,4-benzenedicarboxylate, 1,2-ethanediol, 2,2'-(methylenedi-4,1-phenylene)bis[2,3-dihydro-1,3-dioxo-1H-isoindole-5-carboxylic acid] and 1,2,3-propanetriol (9CI) (CA INDEX NAME)

CM 1

CRN 4649-32-5

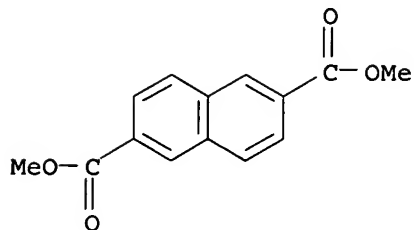
CMF C31 H18 N2 O8



CM 2

CRN 840-65-3

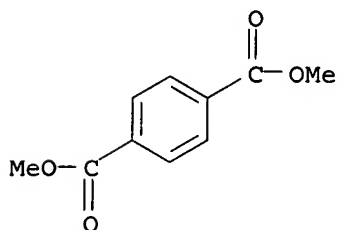
CMF C14 H12 O4



CM 3

CRN 120-61-6

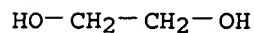
CMF C10 H10 O4



CM 4

CRN 107-21-1

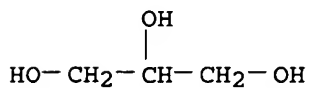
CMF C2 H6 O2



CM 5

CRN 56-81-5

CMF C3 H8 O3



IC ICM C09D167-02

ICS C09D005-25; C09D179-08; H01B003-42

CC 42-8 (Coatings, Inks, and Related Products)

Section cross-reference(s): 76

IT 56524-62-0P, Dimethyl 2,6-naphthalenedicarboxylate-ethylene glycol-glycerol copolymer 163036-47-3P, Dimethyl 2,6-naphthalene dicarboxylate-dimethyl terephthalate-ethylene glycol-glycerol copolymer 182690-40-0P, Dimethyl

2,6-naphthalenedicarboxylate-ethylene glycol
 -glycerol-4,4'-diaminodiphenylmethane-trimellitic anhydride
 copolymer 325170-20-5P, 1,3-Butanediol-dimethyl 2,6-naphthalene
 dicarboxylate-dimethyl terephthalate-ethylene glycol
 -glycerol copolymer 325170-21-6P, Dimethyl 2,6-
 naphthalenedicarboxylate-ethylene glycol-propylene
 glycol-trimellitic anhydride copolymer 325170-22-7P,
 Dimethyl 2,6-naphthalene dicarboxylate-dimethyl
 terephthalate-ethylene glycol-glycerol-trimellitic
 anhydride copolymer 325170-23-8P, 4,4'-Bis(N-
 trimellitide)diphenylmethane-dimethyl 2,6-
 naphthalenedicarboxylate-dimethyl terephthalate-ethylene
 glycol-glycerol copolymer 325170-24-9P, Dimethyl
 2,6-naphthalenedicarboxylate-ethylene glycol
 -glycerol-4,4'-diaminodiphenylmethane-propylene glycol
 -trimellitic anhydride copolymer
 (2,6-naphthalene diacid- and aliphatic polyol-based
 polyester-containing elec. insulating coatings with easy soldering
 peelability)

L32 ANSWER 30 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:62567 HCAPLUS
 DOCUMENT NUMBER: 134:132600
 TITLE: Radiation-curable resin compositions for
 making color filters
 INVENTOR(S): Sakurai, Koichi; Watanabe, Takeshi
 PATENT ASSIGNEE(S): JSR Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|--------------|
| ----- | ---- | ----- | ----- | |
| JP 2001021713 | A2 | 20010126 | JP 1999-189882 | 1999 0705 |
| PRIORITY APPLN. INFO.: | | | | 1999 0705 |
| | | | | 1999 0705 |

OTHER SOURCE(S): MARPAT 134:132600

AB The compns. comprise (A) colorants, (B) alkali-soluble resins, (C)
 polyfunctional monomers, (D) (meth)acrylate esters bearing
 imidazolyl groups, and (E) photoinitiators. Thus, mixing a C.I.
 Pigment Red 177/C.I. Pigment Red 224 65:35 mixture 100 with a benzyl
 methacrylate-glycerol monomethacrylate-methacrylic
 acid-N-phenylmaleimide-styrene copolymer 70, dipentaerythritol
 hexaacrylate 80, 2-(2'-methylimidazolyl)ethyl methacrylate 10,
 2-benzyl-2-dimethylamino-1-(4-morpholinophenyl)-1-butanone 50 and
 propylene glycol monomethyl ether acetate 1000 parts,
 coating the resulting mixture on the surface of a soda glass,
 pre-baking, irradiating with UV light via a photomask, developing
 in a KOH solution, washing and post baking gave a color filter.

IT 321849-21-2, Benzyl methacrylate-dipentaerythritol
 hexaacrylate-glycerol monomethacrylate-2-(2'-
 methylimidazolyl)ethyl methacrylate-methacrylic

acid-N-phenylmaleimide-styrene copolymer 321849-24-5
321849-25-6

(radiation-curable resin compns. for making color filters)

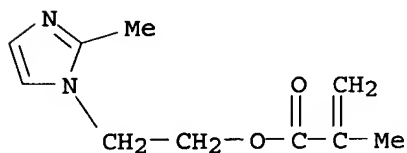
RN 321849-21-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene,
2-(2-methyl-1H-imidazol-1-yl)ethyl 2-methyl-2-propenoate,
2-[[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-
propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-
propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, phenylmethyl
2-methyl-2-propenoate, 1-phenyl-1H-pyrrole-2,5-dione and
1,2,3-propanetriol mono(2-methyl-2-propenoate) (9CI) (CA INDEX
NAME)

CM 1

CRN 34375-24-1

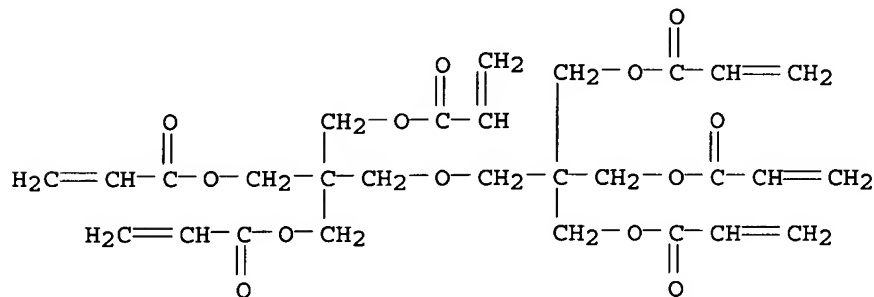
CMF C10 H14 N2 O2



CM 2

CRN 29570-58-9

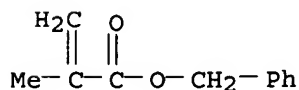
CMF C28 H34 O13



CM 3

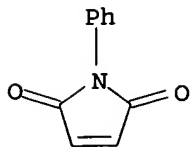
CRN 2495-37-6

CMF C11 H12 O2



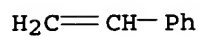
CM 4

CRN 941-69-5
 CMF C10 H7 N O2



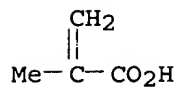
CM 5

CRN 100-42-5
 CMF C8 H8



CM 6

CRN 79-41-4
 CMF C4 H6 O2

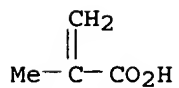


CM 7

CRN 50853-28-6
 CMF C7 H12 O4
 CCI IDS

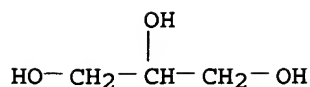
CM 8

CRN 79-41-4
 CMF C4 H6 O2



CM 9

CRN 56-81-5
 CMF C3 H8 O3



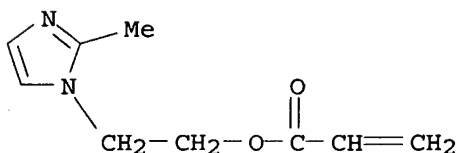
RN 321849-24-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, α -hydro- ω -[(1-oxo-2-propenyl)oxy]poly[oxy(1-oxo-1,6-hexanediyl)], 2-(2-methyl-1H-imidazol-1-yl)ethyl 2-propenoate, 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, phenylmethyl 2-methyl-2-propenoate, 1-phenyl-2H-pyrrole-2,5-dione and 1,2,3-propanetriol mono(2-methyl-2-propenoate), graft (9CI) (CA INDEX NAME)

CM 1

CRN 321849-23-4

CMF C9 H12 N2 O2

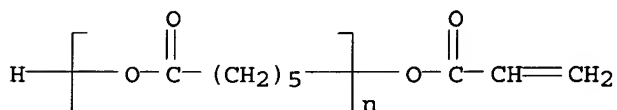


CM 2

CRN 97387-29-6

CMF (C6 H10 O2)_n C3 H4 O2

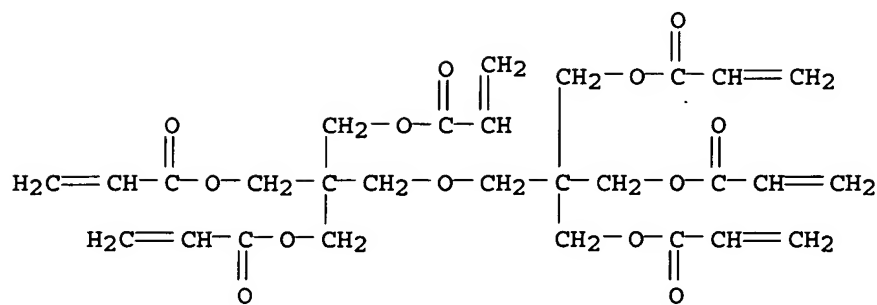
CCI PMS



CM 3

CRN 29570-58-9

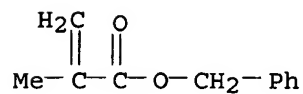
CMF C28 H34 O13



CM 4

CRN 2495-37-6

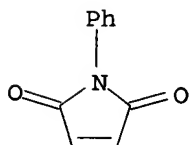
CMF C11 H12 O2



CM 5

CRN 941-69-5

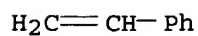
CMF C10 H7 N O2



CM 6

CRN 100-42-5

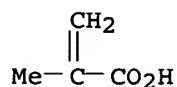
CMF C8 H8



CM 7

CRN 79-41-4

CMF C4 H6 O2



CM 8

CRN 50853-28-6

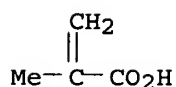
CMF C7 H12 O4

CCI IDS

CM 9

CRN 79-41-4

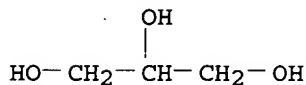
CMF C4 H6 O2



CM 10

CRN 56-81-5

CMF C3 H8 O3



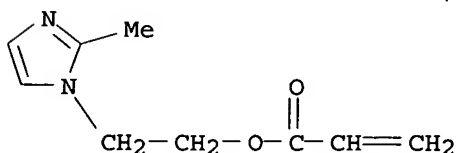
RN 321849-25-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene,
 2-(2-methyl-1H-imidazol-1-yl)ethyl 2-propenoate, 2-oxepanone,
 2-[[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, phenylmethyl 2-methyl-2-propenoate, 1-phenyl-1H-pyrrole-2,5-dione and 1,2,3-propanetriol mono(2-methyl-2-propenoate), graft (9CI) (CA INDEX NAME)

CM 1

CRN 321849-23-4

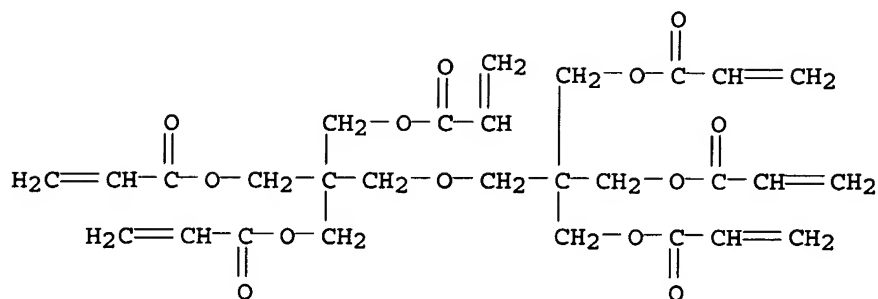
CMF C9 H12 N2 O2



CM 2

CRN 29570-58-9

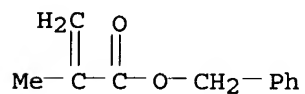
CMF C28 H34 O13



CM 3

CRN 2495-37-6

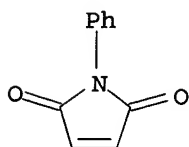
CMF C11 H12 O2



CM 4

CRN 941-69-5

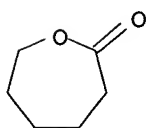
CMF C10 H7 N O2



CM 5

CRN 502-44-3

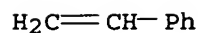
CMF C6 H10 O2



CM 6

CRN 100-42-5

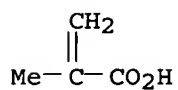
CMF C8 H8



CM 7

CRN 79-41-4

CMF C4 H6 O2



CM 8

CRN 50853-28-6

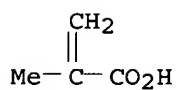
CMF C7 H12 O4

CCI IDS

CM 9

CRN 79-41-4

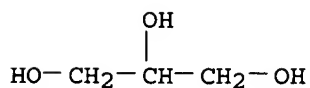
CMF C4 H6 O2



CM 10

CRN 56-81-5

CMF C3 H8 O3



IC ICM G02B005-20

ICS C08F002-48; C08F291-06; G03F007-004; G03F007-027; G03F007-032

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 74, 76

IT 321849-21-2, Benzyl methacrylate-dipentaerythritol

hexaacrylate-glycerol monomethacrylate-2-(2'-

methylimidazolyl)ethyl methacrylate-methacrylic

acid-N-phenylmaleimide-styrene copolymer 321849-22-3, Benzyl

methacrylate-dipentaerythritol hexaacrylate-2-(2-methyl-1-imidazolyl)ethyl methacrylate-methacrylic acid-styrene copolymer
321849-24-5 321849-25-6

(radiation-curable resin compns. for making color filters)

L32 ANSWER 31 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:40117 HCAPLUS

DOCUMENT NUMBER: 134:87355

TITLE: Resin paste compositions and semiconductor devices therewith

INVENTOR(S): Sawabe, Koichi; Aichi, Katsuhide

PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|--------------------------------|
| ----- | ---- | ----- | ----- | |
| JP 2001011135 | A2 | 20010116 | JP 1999-186050 | 1999 0630 |
| PRIORITY APPLN. INFO.: | | | | JP 1999-186050 1999 0630 |

AB Title compns. contain allyl diimides, unsatd. diluents, radical initiators, and fillers. A composition containing BANI-X, Kayarad R 712, DDMM 24, Trigonox 22-B75, Epolead PB 4700, A 714, and powdered Ag was applied on a Cu lead frame or an epoxy resin/glass fiber composite to form products showing good adhesion, warping prevention, and solder-heat crack resistance.

IT 317385-84-5P 317385-85-6P
(allyl diimide- and unsatd. diluent-containing elec. conductive adhesives for semiconductor devices)

RN 317385-84-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, polymer with DDMM 24, α,α' -(methylenedi-4,1-phenylene)bis[ω -[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)] and 2,2'-[1,3-phenylenebis(methylene)]bis[3a,4,7,7a-tetrahydro(2-propenyl)-4,7-methano-1H-isoindole-1,3(2H)-dione] (9CI) (CA INDEX NAME)

CM 1

CRN 291543-06-1

CMF Unspecified

CCI MAN

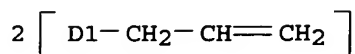
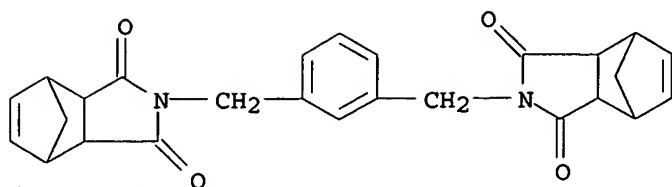
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 165407-21-6

CMF C32 H32 N2 O4

CCI IDS



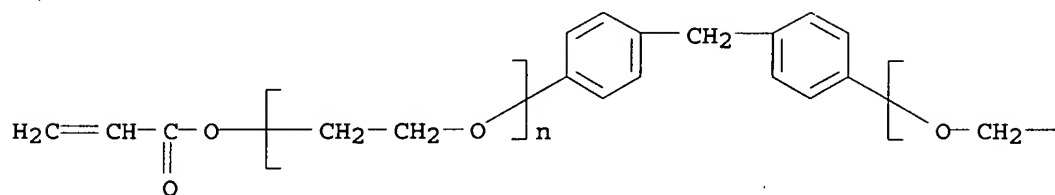
CM 3

CRN 120750-67-6

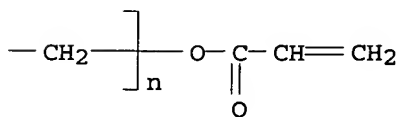
CMF (C2 H4 O)_n (C2 H4 O)_n C19 H16 O4

CCI PMS

PAGE 1-A



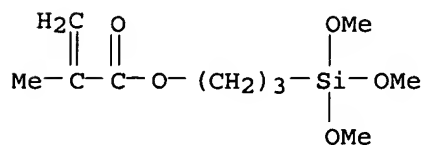
PAGE 1-B



CM 4

CRN 2530-85-0

CMF C10 H20 O5 Si



RN 317385-85-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, polymer with DDMM 24, α, α' -(methylenedi-4,1-phenylene)bis[ω -[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)], 2-(octahydro-1,3-dioxo-2H-isoindol-2-yl)ethyl 2-propenoate and 2,2'-[1,3-phenylenebis(methylene)]bis[3a,4,7,7a-tetrahydro(2-propenyl)-4,7-methano-1H-isoindole-1,3(2H)-dione] (9CI) (CA INDEX NAME)

CM 1

CRN 291543-06-1

CMF Unspecified

CCI MAN

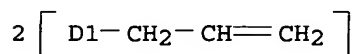
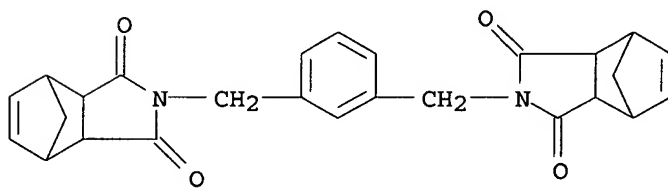
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 165407-21-6

CMF C32 H32 N2 O4

CCI IDS

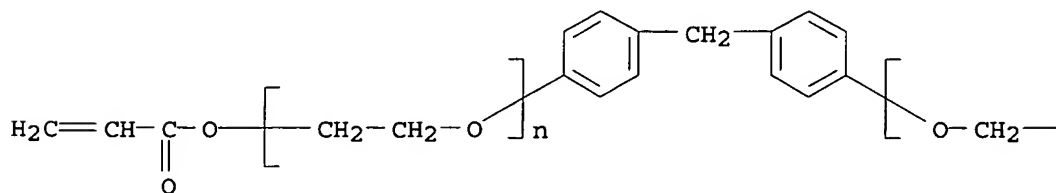


CM 3

CRN 120750-67-6

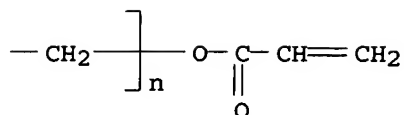
CMF (C2 H4 O)_n (C2 H4 O)_n C19 H16 O4

CCI PMS



PAGE 1-A

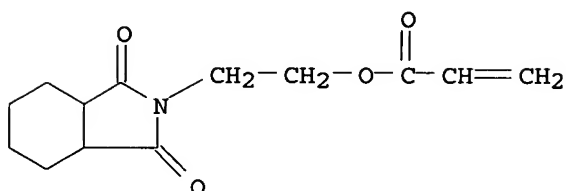
PAGE 1-B



CM 4

CRN 106646-48-4

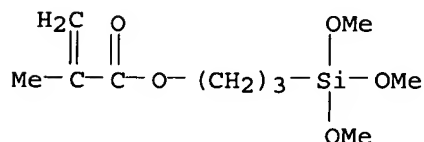
CMF C13 H17 N O4



CM 5

CRN 2530-85-0

CMF C10 H20 O5 Si



IC ICM C08F236-02

ICS C08F002-44; C09J004-00; H01L021-52; C08F290-06

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 39, 76

IT Nitrile rubber, uses

(allyl diimide- and unsatd. diluent-containing elec. conductive adhesives for semiconductor devices)

IT 317385-84-5P 317385-85-6P

(allyl diimide- and unsatd. diluent-containing elec. conductive adhesives for semiconductor devices)

IT 9003-18-3

(nitrile rubber, allyl diimide- and unsatd. diluent-containing elec. conductive adhesives for semiconductor devices)

L32 ANSWER 32 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:19098 HCAPLUS

DOCUMENT NUMBER: 134:73041

TITLE: Electrically insulating film-forming compositions, their film formation and low-density films therefrom

INVENTOR(S): Kurosawa, Takahiko; Shiota, Atsushi; Yamada, Kinji

PATENT ASSIGNEE(S): JSR Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|------|
| ----- | ---- | ----- | ----- | |
| JP 2001002994 | A2 | 20010109 | JP 1999-177697 | |

1999
0624

PRIORITY APPLN. INFO.: JP 1999-177697

1999
0624

OTHER SOURCE(S): MARPAT 134:73041

AB Title compns. comprise (A) R₂R₃R₄Si(OR₁), R₂R₃Si(OR₁)₂, R₂Si(OR₁)₃, Si(OR₁)₄, and/or R₂m(OR₁)₃-mSiR₃Si(OR₁)₃-nR₂n (R₁-R₃ = hydrocarbyl; R = hydrocarbylene; m, n = 0-1), and/or their hydrolyzates, (B) (meth)acrylate polymers containing OH, COOH, glycidyl, amido, polyoxyethylene and/or polyoxypropylene groups, and (C) solvents selected from **alcs.**, **ketones**, **amides**, and esters. Dropwise adding an aqueous solution of maleic acid into a solution comprising MeSi(OMe)₃, Me₂Si(OMe)₂, Si(OMe)₄, Me n-pentyl **ketone**, and propylene glycol mono-Pr ether and reacting at 60° gave a composition, which was mixed with methoxy polyoxyethylene methacrylate homopolymer, spin coated on a Si wafer, heated at 80-200°, and at 340-425° in vacuo to form a transparent film with d. of 1.2 g/cm³, no pores with diameter of ≥10 nm, and modulus 3.7 GPa.

IT 314746-11-7P, Isobutyl acrylate-N-vinyl-2-pyrrolidone copolymer

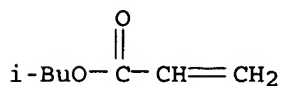
(acrylic resin- and alkoxysilane-containing coatings for manufacture of elec. insulating low-d. porous polysiloxane films)

RN 314746-11-7 HCAPLUS

CN 2-Propenoic acid, 2-methylpropyl ester, polymer with 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

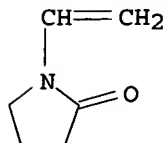
CM 1

CRN 106-63-8
CMF C7 H12 O2



CM 2

CRN 88-12-0
CMF C6 H9 N O



IC ICM C09D183-04
ICS C09D005-25; C09D133-04; C09D183-02; H01L021-312
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 76
IT **Alcohols**, uses
Amides, uses
Esters, uses
Ketones, uses
(solvents; acrylic resin- and alkoxyisilane-containing coatings for manufacture of elec. insulating low-d. porous polysiloxane films)
IT 87105-87-1P 108764-56-3P, Dimethyldimethoxysilane-methyltrimethoxysilane-tetramethoxysilane copolymer
159873-52-6P, Methyltrimethoxysilane-tetramethoxysilane copolymer
314741-86-1P, 1,2-Bis(triethoxysilyl)ethane-dimethyldimethoxysilane-methyltrimethoxysilane-tetramethoxysilane copolymer
314746-11-7P, Isobutyl acrylate-N-vinyl-2-pyrrolidone copolymer
(acrylic resin- and alkoxyisilane-containing coatings for manufacture of elec. insulating low-d. porous polysiloxane films)
IT 68-12-2, DMF, uses 110-43-0, Methyl n-pentyl **ketone**
1320-67-8, Propylene **glycol** monomethyl ether
30136-13-1, Propylene **glycol** monopropyl ether
84540-57-8, Propylene **glycol** monomethyl ether acetate
(solvents; acrylic resin- and alkoxyisilane-containing coatings for manufacture of elec. insulating low-d. porous polysiloxane films)

L32 ANSWER 33 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:900736 HCAPLUS
DOCUMENT NUMBER: 134:57684
TITLE: Pressure sensitive amide-functional adhesive
INVENTOR(S): Peloquin, Richard L.; Everaerts, Albert I.; Aeling, Ellen O.
PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA
SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|--------------|
| ----- | ---- | ----- | ----- | ----- |
| WO 2000077117 | A1 | 20001221 | WO 1999-US25197 | 1999 1027 |

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH,
CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI,

FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
 KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG,
 MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
 SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA,
 ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH,
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,
 SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN,
 TD, TG

US 2002115808 A1 20020822 US 1999-330923

1999
0611

US 6441114 B1 20020827
 PRIORITY APPLN. INFO.:

US 1999-330923 A

1999
0611

AB Adhesives useful in applying articles, such as tapes, labels, signs, decals, emblems, car moldings, protective or optical films, etc., to surfaces to which articles normally do not adhere well, such as surfaces containing fluorine and polycarbonate, for example. The adhesives include a copolymer of one or more monoethylenically unsatd. alkyl(meth)acrylate monomers, one or more monoethylenically unsatd. secondary or tertiary amide-functional monomers, and optionally one or more acidic monomers.

IT 151565-52-5P, Acrylic acid-butyl
 acrylate-ethyl acrylate-N-vinylpyrrolidone copolymer
 (pressure sensitive ~~amide~~-functional adhesive)

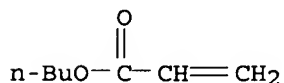
RN 151565-52-5 HCAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate,
 1-ethenyl-2-pyrrolidinone and ethyl 2-propenoate (9CI) (CA INDEX
 NAME)

CM 1

CRN 141-32-2

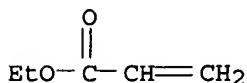
CMF C7 H12 O2



CM 2

CRN 140-88-5

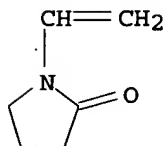
CMF C5 H8 O2



CM 3

CRN 88-12-0

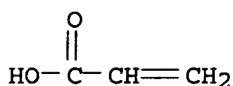
CMF C6 H9 N O



CM 4

CRN 79-10-7

CMF C3 H4 O2



IC ICM C09J133-06

ICS B32B027-30

CC 38-3 (Plastics Fabrication and Uses)

IT 151565-52-5P, Acrylic acid-butyl
 acrylate-ethyl acrylate-N-vinylpyrrolidone copolymer
 264871-11-6P, Acrylic acid-butyl acrylate-N,N-dimethylacrylamide
 copolymer 313644-03-0P, Acrylic acid-butyl acrylate-ethyl
 acrylate-N,N-dimethylacrylamide copolymer 313644-04-1P
 313644-05-2P, Acrylic acid-butyl acrylate-ethyl
 acrylate-N-octylacrylamide copolymer
 (pressure sensitive amide-functional adhesive)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE
 FOR THIS RECORD. ALL CITATIONS AVAILABLE
 IN THE RE FORMAT

L32 ANSWER 34 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:129885 HCAPLUS

DOCUMENT NUMBER: 132:322171

TITLE: Crosslinking photocopolymerization of acrylic
 acid (and N-vinylpyrrolidone) with triethylene
 glycol dimethacrylate initiated by
 camphorquinone/ethyl-4-dimethylaminobenzoate
 AUTHOR(S): Jakubiak, J.; Nie, J.; Linden, L.-A.; Rabek,
 J. F.

CORPORATE SOURCE: Department of Chemistry, Jagiellonian
 University, Krakow, PL-30 060, Pol.

SOURCE: Journal of Polymer Science, Part A: Polymer
 Chemistry (2000), 38(5), 876-886
 CODEN: JPACEC; ISSN: 0887-624X

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We report the camphorquinone/amine visible-light-induced
 photocopolymerization of monofunctional acrylic acid (AA),
 N-vinylpyrrolidone (NVP), or both with difunctional
 triethyleneglycol dimethacrylate (TEGDMA) monomers followed by the
 crosslinking of pendant double-bond groups of the resulting
 homopolymers and copolymers. Our primary objective was to study

the photocopolymerizability of various mixts. of AA, NVP, and TEGDMA compns. at different molar ratios in air. The photocopolymer of AA with TEGDMA occurred with the formation of two peaks at different rates of polymerization

IT 50733-17-0P, Triethylene glycol dimethacrylate-N-vinylpyrrolidone copolymer (crosslinking photocopolymer of acrylic acid (and N-vinylpyrrolidone) with triethyleneglycol dimethacrylate initiated by camphorquinone-Et dimethylaminobenzoate)

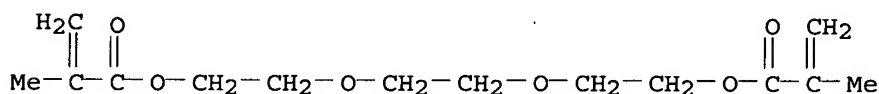
RN 50733-17-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester, polymer with 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 109-16-0

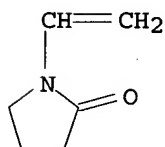
CMF C14 H22 O6



CM 2

CRN 88-12-0

CMF C6 H9 N O



CC 35-3 (Chemistry of Synthetic High Polymers)

IT 50733-17-0P, Triethylene glycol dimethacrylate-N-vinylpyrrolidone copolymer 65048-14-8P, Acrylic acid-triethylene glycol dimethacrylate copolymer 115239-50-4P (crosslinking photocopolymer of acrylic acid (and N-vinylpyrrolidone) with triethyleneglycol dimethacrylate initiated by camphorquinone-Et dimethylaminobenzoate)

REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 35 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:114378 HCAPLUS

DOCUMENT NUMBER: 132:167371

TITLE: Crosslinkable, electrically conductive composition, electric conductor and process for forming the same

INVENTOR(S): Shimizu, Shigeru; Uzawa, Masashi; Saitoh, Takashi; Yuasa, Masami; Takayanagi, Yasuyuki; Sugama, Naoki

PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan

SOURCE: U.S., 20 pp., Cont.-in-part of Appl. No.
PCT/JP96/02261.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|--------------|
| US 6024895 | A | 20000215 | US 1997-950791 | 1997 1015 |
| WO 9707167 | A1 | 19970227 | WO 1996-JP2261 | 1996 0809 |

W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KR,
KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO,
NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT,
UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR,
GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
CM, GA

PRIORITY APPLN. INFO.: JP 1995-227072 A 1995
0811
WO 1996-JP2261 A2 1996
0809
JP 1996-291235 A 1996
1015

AB The title composition comprises: (a) a soluble, elec. conducting polymer having a sulfonic acid group and/or a carboxyl group and showing a conductivity by self-doping with the sulfonic acid group and/or the carboxylic group and (c) a compound having at least two functional groups capable of reacting with the sulfonic acid group and/or carboxyl group of the polymer (a), hence referred to as crosslinkable compound (c), the crosslinkable compound (c) being a low mol. weight compound selected from the group consisting of a cycloaliph. diol or polyol, a sugar, an epoxy compound, a melamine and a urea.

IT 135899-67-1P

(crosslinkable, elec. conductive composition, elec. conductor and process for forming the same)

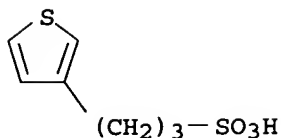
RN 135899-67-1 HCAPLUS

CN 3-Thiophenepropanesulfonic acid, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 135899-66-0

CMF C7 H10 O3 S2

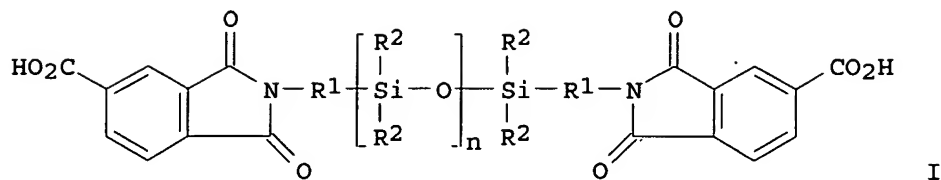


IC H01B001-12; H01B001-20
 INCL 252500000
 CC 38-3 (Plastics Fabrication and Uses)
 Section cross-reference(s): 76
 IT 25233-30-1DP, Polyaniline, sulfonated 135899-67-1P
 167860-86-8P, 2-Aminoanisole-4-sulfonic acid homopolymer
 179027-39-5P
 (crosslinkable, elec. conductive composition, elec. conductor and
 process for forming the same)
 IT 50-99-7, Glucose, uses 111-46-6, Diethylene glycol,
 uses 556-48-9, 1,4-Cyclo-hexanediol 9002-89-5, Polyvinyl
 alcohol 9003-20-7, Pegar 365 26355-01-1, Hydroxyethyl
 methacrylate-Methyl methacrylate copolymer 27756-39-4
 58607-87-7, Hexamethoxy-methylol-melamine 82200-41-7, Vylonal
 MD-1200 91449-62-6, Diabeam 166798-75-0, Arastar 300
 180855-13-4, Nikasol RX 301c 188674-09-1, Diakron ER
 188674-10-4, DX-301 188674-12-6, NK-oligo UA-W63
 (crosslinkable, elec. conductive composition, elec. conductor and
 process for forming the same)
 REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE
 FOR THIS RECORD. ALL CITATIONS AVAILABLE
 IN THE RE FORMAT

L32 ANSWER 36 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2000:43395 HCAPLUS
 DOCUMENT NUMBER: 132:94431
 TITLE: Manufacture of polyamide-polyimides, their
 compositions, and their thixotropic pastes for
 electronic parts
 INVENTOR(S): Ohkawara, Toshikazu; Hirata, Tomohiro
 PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|--------------|
| JP 2000017073 | A2 | 20000118 | JP 1998-185488 | 1998 0630 |
| PRIORITY APPLN. INFO.: | | | | 1998 0630 |

GI



I

AB Polyamide-polyimides are manufactured by reaction of (A) diimidodicarboxylic acid-containing carboxylic acid I ($n = 1-100$, $R_1 =$ divalent aliphatic group; $R_2 =$ monovalent aliphatic or aromatic group), prepared by reaction of diaminopolysiloxanes and tribasic carboxylic acid (derivs.) having acid anhydride group with (B) aromatic polyisocyanates and optionally (C) $\text{HO}_2\text{C}(\text{CH}_2\text{CH}:\text{CHCH}_2)_a[\text{CH}_2\text{CH}(\text{CH}:\text{CH}_2)]_b(\text{CH}_2\text{CR}_3\text{R}_4)\text{cCO}_2\text{H}$ [$a, b, c = 0-80$; $a/b = 1/0-0/1$, $(a + b)/c = 1/0-0/1$, $a + b + c = 1-80$, $R_3 = \text{H, Me}$; $R_4 = \text{cyano, CO}_2\text{H, amino, OH, epoxy, Ph}$] or $\text{HO}_2\text{C}[(\text{CH}_2)_4]_d(\text{CH}_2\text{CHEt})_e(\text{CH}_2\text{CR}_3\text{R}_4)_f\text{CO}_2\text{H}$ ($d, e, f = 1-80$, $d/e = 1/0-0/1$, $(d + e)/f = 1/0-0/1$, $d + e + f = 1-80$) in N-free polar solvents. The compns. comprise 100 parts of the above polyamide-polyimides and 1-50 parts epoxy resins. The thixotropic pastes contain inorg. and/or organic fine particles dispersed in the above polyamide-polyimide compns. Thus, 0.1 mol X 22-161A (aminopropyl-terminated di-Me siloxane) reacted with 0.2 mol trimellitic anhydride at $90-170^\circ$ for 3 h and then with 0.1 mol 4.4'-MDI to give a polyamide-polyimide varnish with acid value 15 KOHmg/g, nonvolatile content 40%, viscosity 10 Pa-s and thixotropic index 1.2, 100 parts of which was mixed with 10 parts Deconal EX 321 and 1200 g of of thus obtained composition was mixed with 34.0 g Aerosil 380 (SiO_2) to give a paste with viscosity 23 Pa-s and thixotropic index 2.4 after staying for 12 h and good solder flux resistance, less warpage after curing, good adhesion to Cu foils after pressure-cooker test, and good solvent resistance.

IT 254428-55-2P

(manufacture of heat- and solvent-resistant polyamide-polyimide-siloxanes thixotropic pastes for electronic parts)

RN 254428-55-2 HCAPLUS

CN Poly[oxy(dimethylsilylene)], α -[[[3-(5-carboxy-1,3-dihydro-1,3-dioxo-2H-isindol-2-yl)propyl]dimethylsilyl]- ω -[[[3-(5-carboxy-1,3-dihydro-1,3-dioxo-2H-isindol-2-yl)propyl]dimethylsilyl]oxy]-, polymer with 1,1'-methylenebis[4-isocyanatobenzene] (9CI) (CA INDEX NAME)

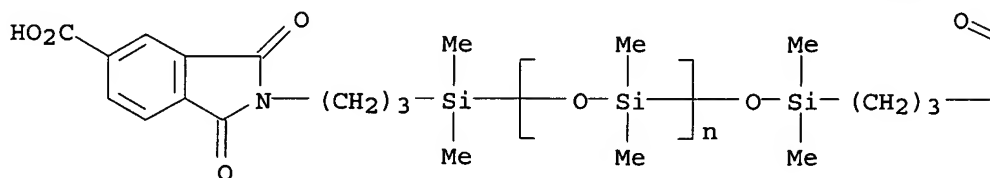
CM 1

CRN 225098-15-7

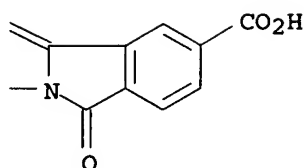
CMF (C2 H6 O Si) $_n$ C28 H32 N2 O9 Si2

CCI PMS

PAGE 1-A



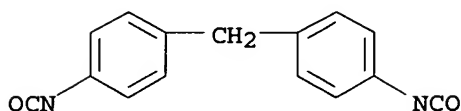
PAGE 1-B



CM 2

CRN 101-68-8

CMF C15 H10 N2 O2



- IC ICM C08G073-14
ICS C08G018-61; C08G018-62; C08G018-67; C08G059-44
- CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 76
- IT **Nitrile** rubber, uses
(carboxy-terminated, CTBN 1300X9, polymers with aminopropyl-terminated siloxanes, trimellitic anhydride, and MDI; manufacture of heat- and solvent-resistant polyamide-polyimide-siloxanes thixotropic pastes for electronic parts)
- IT 101-68-8DP, 4,4'-MDI, polymers with aminopropyl-terminated di-Me siloxane, trimellitic anhydride, and **nitrile** rubber 552-30-7DP, Trimellitic anhydride, polymers with aminopropyl-terminated di-Me siloxane, MDI, and **nitrile** rubber 31900-57-9DP, Dimethylsilanediol homopolymer, diaminopropyl-terminated, polymers with trimellitic anhydride, MDI, and **nitrile** rubber 97917-34-5DP, X 22-161A, polymers with trimellitic anhydride, MDI, and **nitrile** rubber 254428-55-2P
(manufacture of heat- and solvent-resistant polyamide-polyimide-siloxanes thixotropic pastes for electronic parts)
- IT 9003-18-3P
(**nitrile** rubber, carboxy-terminated, CTBN 1300X9, polymers with aminopropyl-terminated siloxanes, trimellitic anhydride, and MDI; manufacture of heat- and solvent-resistant polyamide-polyimide-siloxanes thixotropic pastes for electronic parts)
- L32 ANSWER 37 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:531296 HCAPLUS
DOCUMENT NUMBER: 131:171294
TITLE: Adhesive films having low temperature adhesion for die-bonding of semiconductor elements
INVENTOR(S): Kato, Toshihiko; Takeda, Shinji; Odagawa, Yasuhisa; Hasegawa, Yuji; Masuko, Takashi
PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan

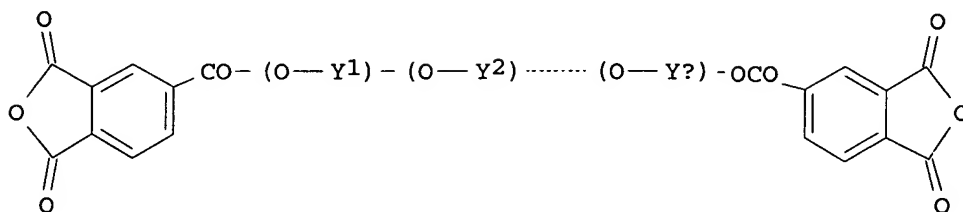
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|--------------|
| JP 11228915 | A2 | 19990824 | JP 1998-34640 | 1998 0217 |

PRIORITY APPLN. INFO.: JP 1998-34640

1998
0217

GI



AB Title films comprise (A) 100 parts polyimide resins obtained by reaction of tetracarboxylic dianhydride containing ≥ 30 mol% tetracarboxylic dianhydride represented by I ($n = 2-30$; $Y_1-Y_n =$ independently C_1-C_{10} alkyl) with diamines, (B) 1-200 parts thermally curable resins, and (C) 0-8000 parts fillers. Thus, a composition comprising polyimide prepared from 2,2-Bis(4-(4-aminophenoxy)phenyl)propane and diethylene glycol bis(trimellitate dianhydride) 100, N 865 epoxy resin 10, VH 4170 phenolic resin 5.6, curing accelerator 0.5, and TCG 1 silver powder 100 parts was applied on a polypropylene base film, thermally cured, and the base film was removed to give an adhesive film, which was placed between silicon chip and copper lead frame and heat-pressed at 200-250° for 3 s giving good peel strength.

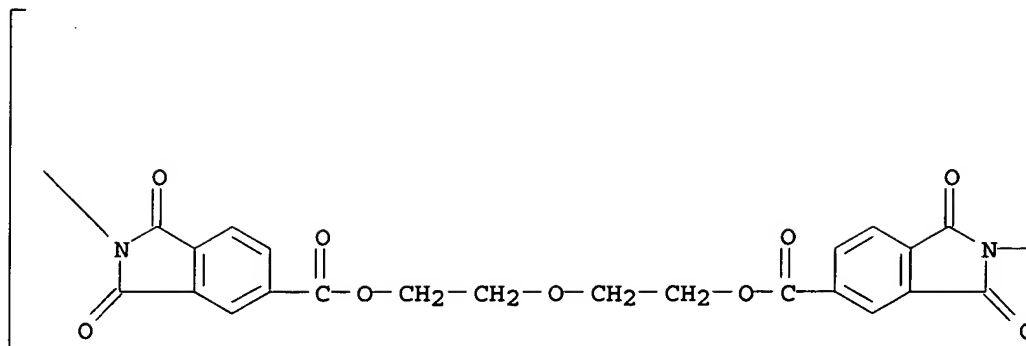
IT 237060-05-8P

(preparation of adhesive films having low temperature adhesion for die-bonding of semiconductor elements)

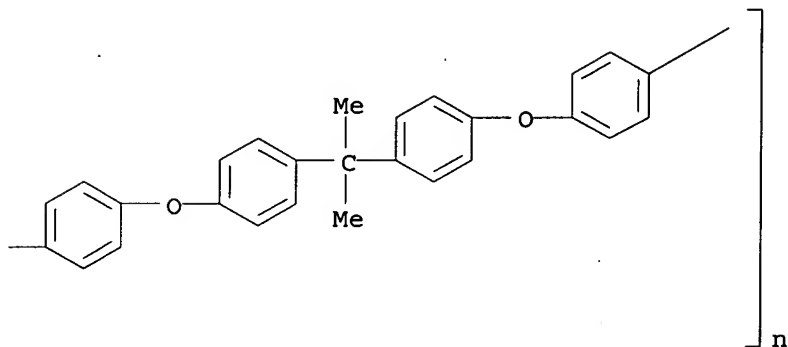
RN 237060-05-8 HCAPLUS

CN Poly[(1,3-dihydro-1,3-dioxo-2H-isoindole-2,5-diyl)carbonyloxy-1,2-ethanediyloxy-1,2-ethanediyloxycarbonyl(1,3-dihydro-1,3-dioxo-2H-isoindole-5,2-diyl)-1,4-phenyleneoxy-1,4-phenylene(1-methylethylidene)-1,4-phenyleneoxy-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM C09J007-00
 ICS C09J011-04; C09J179-08; H01L021-52; C09J201-00
 CC 38-3 (Plastics Fabrication and Uses)
 Section cross-reference(s): 76
 ST adhesive film prepn semiconductor element; polyimide
 aminophenoxyphenylpropane diethylene glycol trimellitate
 anhydride copolymer prepn; epoxy phenolic resin thermally curable;
 silicon copper lead frame adhesive film
 IT 237059-98-2P 237060-02-5P 237060-05-8P 237426-40-3P
 (preparation of adhesive films having low temperature adhesion for
 die-bonding of semiconductor elements)

L32 ANSWER 38 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:425469 HCAPLUS

DOCUMENT NUMBER: 131:78438

TITLE: Controlled release, drug-delivery tableted
 composition including a polymer of a
 vinyl amide, (meth)acrylic acid, a long chain
 alkyl (meth)acrylate and a lower alkyl
 (meth)acrylate

INVENTOR(S): Shih, Jenn S.; Nerella, Nadhamuni G.; Menon,
 Anil; Chakrabarti, Sibn

PATENT ASSIGNEE(S): ISP Investments Inc., USA

SOURCE: U.S., 5 pp.

DOCUMENT TYPE: CODEN: USXXAM
 LANGUAGE: Patent
 FAMILY ACC. NUM. COUNT: 1 English
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|-------------------|
| US 5919484 | A | 19990706 | US 1998-7409 | 1998 0115 |
| WO 9936058 | A1 | 19990722 | WO 1999-US258 | 1999 0107 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 9921065 | A1 | 19990802 | AU 1999-21065 | 1999 0107 |
| EP 1047408 | A1 | 20001102 | EP 1999-901344 | 1999 0107 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| PRIORITY APPLN. INFO.: | | | US 1998-7409 | A 1998 0115 |
| | | | WO 1999-US258 | W 1999 0107 |

AB The invention relates to a controlled release, drug-delivery tableted **composition** comprising, by weight, an uncrosslinked or crosslinked polymer of (a) about 5-40% of a vinyl amide, (b) about 10-70% of (meth)acrylic acid, (c) about 5-40% of a long chain alkyl (meth)acrylate or acrylamide, and (d) about 0-60% of a lower alkyl (meth)acrylate, and a pharmaceutical medicament e.g. theophylline.

IT 54868-00-7P 126425-15-8P 226902-70-1P
 228721-14-0P 228721-15-1P

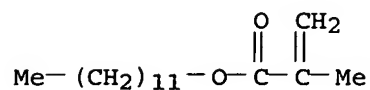
(controlled release, drug-delivery tableted **composition** including a polymer of a vinyl **amide**, (meth) **acrylic acid**, a long chain alkyl (meth)acrylate and a lower alkyl (meth)acrylate)

RN 54868-00-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with dodecyl 2-methyl-2-propenoate and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

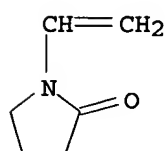
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CRN 142-90-5
CMF C16 H30 O2



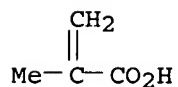
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CRN 88-12-0
CMF C6 H9 N O



CM 3

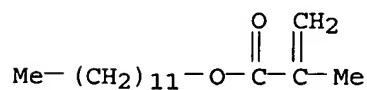
CRN 79-41-4
CMF C4 H6 O2



RN 126425-15-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with dodecyl
2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone and methyl
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

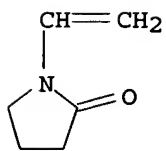
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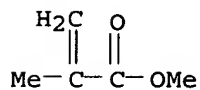


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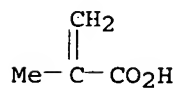
CRN 88-12-0
CMF C6 H9 N O



CRN 80-62-6
CMF C5 H8 O2

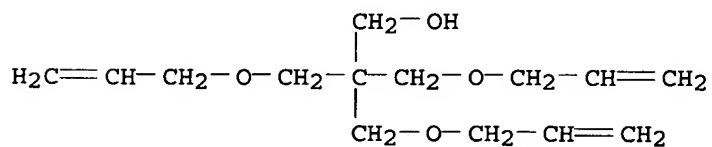


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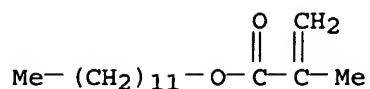


| | | | |
|----|---|---------|--|
| RN | 226902-70-1 | HCAPLUS | |
| CN | 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with 1-ethenyl-2-pyrrolidinone, 2-propenoic acid and 3-(2-propenyloxy)-2,2-bis[(2-propenyloxy)methyl]-1-propanol (9CI) (CA INDEX NAME) | | |

CRN 1471-17-6
CMF C14 H24 O4



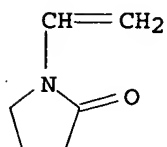
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CM 3

CRN 88-12-0

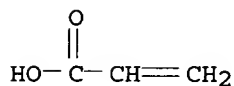
CMF C6 H9 N O



CM 4

CRN 79-10-7

CMF C3 H4 O2



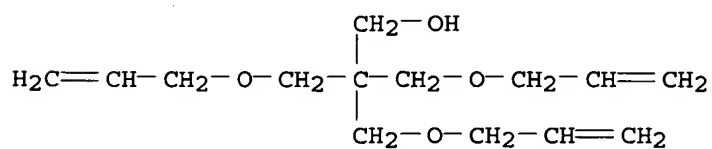
RN 228721-14-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with dodecyl
 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone and
 3-(2-propenyloxy)-2,2-bis[(2-propenyloxy)methyl]-1-propanol (9CI)
 (CA INDEX NAME)

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CRN 1471-17-6

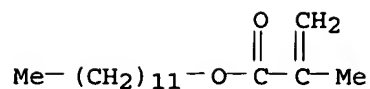
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CM 2

CRN 142-90-5

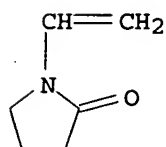
CMF C16 H30 O2



CM 3

CRN 88-12-0

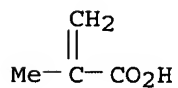
CMF C6 H9 N O



CM 4

CRN 79-41-4

CMF C4 H6 O2



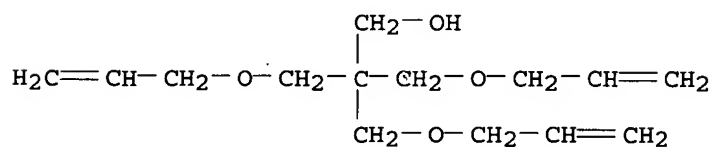
RN 228721-15-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with dodecyl
 2-methyl-2-propenoate, 1-ethenyl-2-pyrrolidinone, methyl
 2-methyl-2-propenoate and 3-(2-propenyloxy)-2,2-bis[(2-
 propenyloxy)methyl]-1-propanol (9CI) (CA INDEX NAME)

CM 1

CRN 1471-17-6

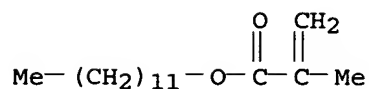
CMF C14 H24 O4



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CRN 142-90-5

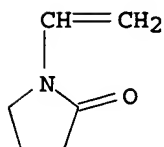
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CM 3

CRN 88-12-0

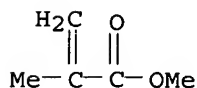
CMF C6 H9 N O



CM 4

CRN 80-62-6

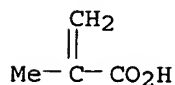
CMF C5 H8 O2



CM 5

CRN 79-41-4

CMF C4 H6 O2



IC ICM A61K009-22

INCL 424468000

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 38

IT Drug delivery systems

(tablets, controlled-release; controlled release, drug-delivery tableted **composition** including a polymer of a vinyl amide, (meth)acrylic acid, a long chain alkyl (meth)acrylate and a lower alkyl (meth)acrylate)

IT 54868-00-7P 126425-15-8P 226902-70-1P

228721-14-0P 228721-15-1P

(controlled release, drug-delivery tableted **composition** including a polymer of a vinyl **amide**, (meth) **acrylic acid**, a long chain alkyl (meth)acrylate and a lower alkyl (meth)acrylate)

IT 58-55-9, Theophylline, biological studies

(controlled release, drug-delivery tableted **composition** including a polymer of a vinyl amide, (meth)acrylic acid, a long chain alkyl (meth)acrylate and a lower alkyl (meth)acrylate)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 39 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:231940 HCAPLUS

DOCUMENT NUMBER: 130:312909

TITLE: Semiconductor device and packaging of the device using adhesive film containing thermosetting resins and resins with low elasticity

INVENTOR(S): Nagai, Akira; Ogino, Masahiko; Eguchi, Shuji; Segawa, Masanori; Ueno, Isao; Nishimura, Asao; Akiyama, Yukiharu; Miyazaki, Chuichi

PATENT ASSIGNEE(S): Hitachi, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|--------------|
| ----- | ---- | ----- | ----- | |
| JP 11097578 | A2 | 19990409 | JP 1997-256420 | 1997 0922 |

PRIORITY APPLN. INFO.: JP 1997-256420

1997
0922

AB Title device includes a tape having a circuit layer, a semiconductor element elec. connected to the tape, external terminals (for elec. connecting the element and a packaging substrate) on the tape, and an adhesive film comprising a thermosetting resin and a resin with low elasticity for bonding the tape and the element in elec. insulation. The device is manufactured by a process including (1) laminating the tape and the adhesive film, (2) laminating the adhesive film and the semiconductor element, (3) elec. connecting the circuit on the tape and the pad layer of the semiconductor element, (4) sealing the elec. connection by an elec. insulator, and (5) forming the external terminals on the tape. The adhesive film containing elastomers with low elasticity contributes to reduction of thermal stress, i.e., takes a roll as stress buffer layer. Thus, a 80:20 mixture of an epoxy resin and an acrylic rubber as the adhesive film was placed between a semiconductor element and a circuit tape then the laminate was pressed at 120° for 30 s and cured at 170° for 60 min. Then, after the pad layer of the semiconductor element and the connecting lead on the circuit tape was connected by single-point-bonding and the contact was sealed with an epoxy resin (RC 021C), solder balls (as terminals) were bonded on the tape to give title device showing no foaming in the adhesive layer after 168-h moisture absorption at 85° and relative humidity 85% followed by heating at 245°.

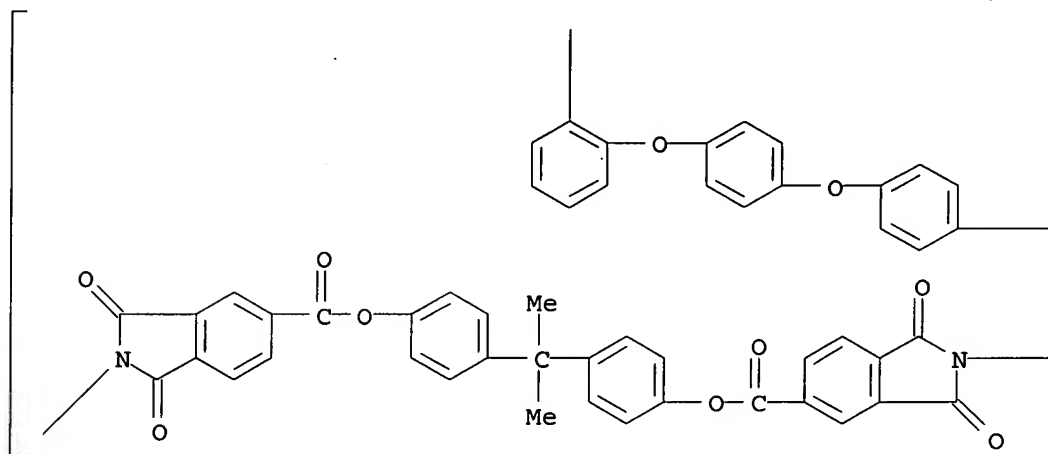
IT 223480-33-9

(semiconductor packaging materials and process using adhesive films comprising thermosetting resins and elastomers with low elasticity)

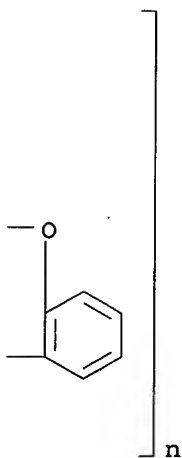
RN 223480-33-9 HCAPLUS

CN Poly[(1,3-dihydro-1,3-dioxo-2H-isoindole-2,5-diyl)carbonyloxy-1,4-phenylene(1-methylethylidene)-1,4-phenyleneoxycarbonyl(1,3-dihydro-1,3-dioxo-2H-isoindole-5,2-diyl)-1,2-phenyleneoxy-1,4-phenyleneoxy-1,4-phenyleneoxy-1,2-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM H01L023-12

ICS C08L027-12; C08L063-00; C08L075-00; C08L077-00; C08L079-00;
C09J007-02; H01L023-14

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 39, 76

IT Acrylic rubber

Butadiene rubber, uses
 Epoxy resins, uses
 Fluoro rubber
 Fluoropolymers, uses
 Nitrile rubber, uses
 Phenolic resins, uses
 Polyamides, uses
 Polycyanurates
 Polyimides, uses
 Polyurethanes, uses
 (semiconductor packaging materials and process using adhesive
 films comprising thermosetting resins and elastomers with low
 elasticity)

IT 9003-18-3
 (nitrile rubber, semiconductor packaging materials
 and process using adhesive films comprising thermosetting
 resins and elastomers with low elasticity)

IT 9003-17-2 117413-18-0, Arocyl 10 homopolymer 223480-28-2
 223480-33-9
 (semiconductor packaging materials and process using adhesive
 films comprising thermosetting resins and elastomers with low
 elasticity)

L32 ANSWER 40 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:684925 HCAPLUS

DOCUMENT NUMBER: 129:303473

TITLE: Circuit connecting materials, and structure
 and method of connecting circuit terminal

INVENTOR(S): Watanabe, Itsuo; Fujinawa, Touru; Arifuku,
 Motohiro; Kanazawa, Houko; Kuwano, Atsusi

PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|--------------|
| WO 9844067 | A1 | 19981008 | WO 1998-JP1467 | 1998 0331 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9865207 | A1 | 19981022 | AU 1998-65207 | 1998 0331 |
| EP 979854 | A1 | 20000216 | EP 1998-911125 | 1998 0331 |
| R: DE, FR, GB, NL | | | | |

| | | | | |
|------------------------|----|----------|----------------|--------------------|
| JP 3587859 | B2 | 20041110 | JP 1998-541457 | 1998 0331 |
| US 6777464 | B1 | 20040817 | US 1999-402274 | 1999 1216 |
| JP 2004128465 | A2 | 20040422 | JP 2003-186397 | 2003 0630 |
| US 2004222408 | A1 | 20041111 | US 2004-860578 | 2004 0604 |
| PRIORITY APPLN. INFO.: | | | JP 1997-79422 | A 1997 0331 |
| | | | JP 1997-79424 | A 1997 0331 |
| | | | JP 1997-252933 | A 1997 0918 |
| | | | JP 1998-541457 | A3 1998 0331 |
| | | | WO 1998-JP1467 | W 1998 0331 |
| | | | US 1999-402274 | A3 1999 1216 |

AB The invention concerns a circuit connecting material to be interposed between circuit electrodes facing each other and, when the facing electrodes are pressed against each other, to elec. connect the electrodes in the pressing direction, which comprises as the essential ingredients (1) a hardener generating free radicals upon heating, (2) a hydroxylated resin having a mol. weight of 10,000 or higher, and (3) a radical-polymerizable substance; and a structure and method of connecting a circuit terminal by using the material. Mixing a 40% solution of PKHC (phenoxy resin) in PhMe/vinyl acetate mixture, 50, with Epolite 80MFA 50 and Percure HO (a peroxide) 5 g, combining the mixture with 3 vol% Ni-plated polystyrene particles as elec. conductors, coating on a 80-µm PET polyester film and drying at 70° for 10 min gave an adhesive film for adhering flexible circuit board.

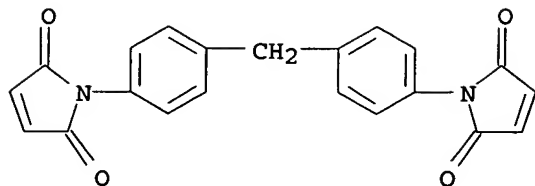
IT 214419-52-0
(circuit connecting materials, and structure and method of connecting circuit terminal)

RN 214419-52-0 HCAPLUS

CN 1H-Pyrrole-2,5-dione, 1,1'-(methylenedi-4,1-phenylene)bis-, polymer with 2-hydroxyethyl 2-methyl-2-propenoate phosphate and 1,1'-(1-methylethylidene)bis[4-(2-propenyloxy)benzene] (9CI) (CA INDEX NAME)

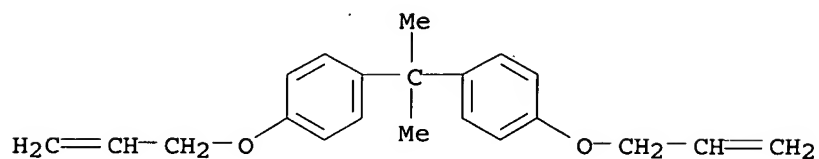
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CM 2

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CMF C21 H24 O2

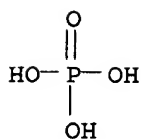


CM 3

CRN 52628-03-2
CMF C6 H10 O3 . x H3 O4 P

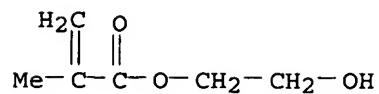
CM 4

CRN 7664-38-2
CMF H3 O4 P



CM 5

CRN 868-77-9
CMF C6 H10 O3



IC ICM C09J201-00
ICS C09J009-02; C09J161-00; C09J163-00; C08L101-00; C08L061-00;
C08L063-00; C08K005-14; H01B001-20; H01L021-60

CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 76

IT **Nitrile** rubber, uses
(carboxy-terminated, blend, Hycar CTBNX 1009SP; circuit
connecting materials, and structure and method of connecting
circuit terminal)

IT 79-10-7D, 2-Propenoic acid, esters with phosphoric acid and
glycol, uses 7664-38-2D, Phosphoric acid, esters with
acrylic acid and **glycol**, uses 25068-38-6, PKHC
120123-31-1, Trihydroxyethyl **glycol** dimethacrylate
homopolymer 214419-12-2 214419-26-8 214419-47-3
214419-51-9 214419-52-0
(circuit connecting materials, and structure and method of
connecting circuit terminal)

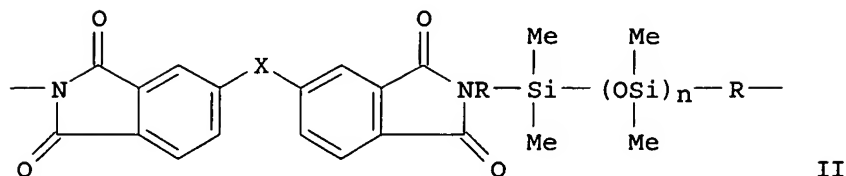
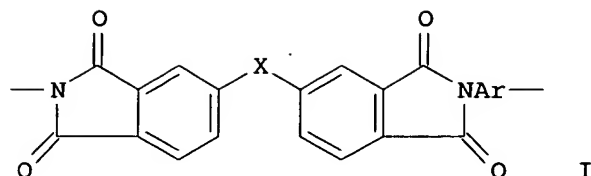
IT 9003-18-3
(**nitrile** rubber, carboxy-terminated, blend, Hycar
CTBNX 1009SP; circuit connecting materials, and structure and
method of connecting circuit terminal)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE
FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L32 ANSWER 41 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:436126 HCAPLUS
DOCUMENT NUMBER: 129:137146
TITLE: Heat-resistant laminated adhesive tapes
containing polyimides for semiconductor
devices
INVENTOR(S): Oka, Osamu
PATENT ASSIGNEE(S): Tomoegawa Paper Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 25 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|------------------|-------------------|
| JP 10183097 | A2 | 19980707 | JP 1996-349558 | 1996 1227 |
| TW 384304 | B | 20000311 | TW 1997-86119347 | 1997 1219 |
| US 6045886 | A | 20000404 | US 1997-998019 | 1997 1224 |
| PRIORITY APPLN. INFO.: | | | JP 1996-358155 | A 1996 1226 |
| | | | JP 1996-349558 | A 1996 1227 |

GI



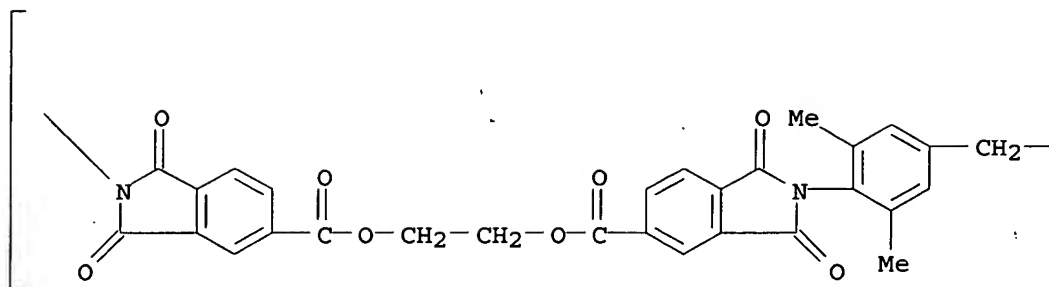
AB The adhesive tapes comprise a base layer sandwiched between 2 adhesive layers, and each of the 3 layers contains polyimides composed of 40-100 mol% structure repeating units I (X = bivalent aromatic group, e.g. C₆H₄C₆H₄, C₆H₄OC₆H₄, C₆H₄CH₂C₆H₄, C₆H₄SC₆H₄, C₆H₄SO₂C₆H₄, C₆H₄CMe₂C₆H₄, etc.; Z = SO₂, CO₂CH₂CH₂O₂C) and 0-60 mol% structure repeating units I [X = RSiMe₂(OSiMe₂)_nR; R = (CH₂)_mOC₆H₄ (the CH₂ group is bonded to Si); m = 1-10; Z = same as above; n = 1-20]. Among the 3 layers, the base layer shows the highest glass transition temperature (T_g). The tapes are used at a relatively low temperature. Thus, a PET film was coated with 67:33:100 mmol 4,4'-diaminodiphenylmethane-1,3-bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane (II)-3,3',4,4'-diphenylsulfonetetracarboxylic dianhydride (III) copolymer (T_g 180°), 100:100 mmol 4,4'-diamino-3,3',5,5'-tetraethyldiphenylmethane-III copolymer (T_g 282°), and 67:33:100 mmol 1,3-bis[1-(4-aminophenyl)-1-methylethyl]benzene-II-III copolymer (T_g 160°) in this order to give an adhesive tape, which was applied to Cu plate to show adhesive strength 35-50 g/10 mm.

IT 182681-58-9P, 4,4'-Diamino-3,3',5,5'-tetraethyldiphenylmethane-ethylene glycol bis(trimellitate) dianhydride copolymer, polyimide sru
182681-61-4P, 4,4'-Diamino-3,3',5,5'-tetraethyldiphenylmethane-ethylene glycol bis(trimellitate) dianhydride copolymer, polyimide sru
(heat-resistant laminated adhesive tapes containing polyimides for semiconductor devices)

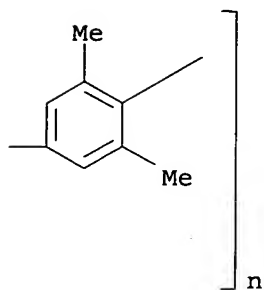
RN 182681-58-9 HCAPLUS

CN Poly[(1,3-dihydro-1,3-dioxo-2H-isoindole-2,5-diyl)carbonyloxy-1,2-ethanediyloxycarbonyl(1,3-dihydro-1,3-dioxo-2H-isoindole-5,2-diyl)(2,6-dimethyl-1,4-phenylene)methylene(3,5-dimethyl-1,4-phenylene)] (9CI) (CA INDEX NAME)

PAGE 1-A

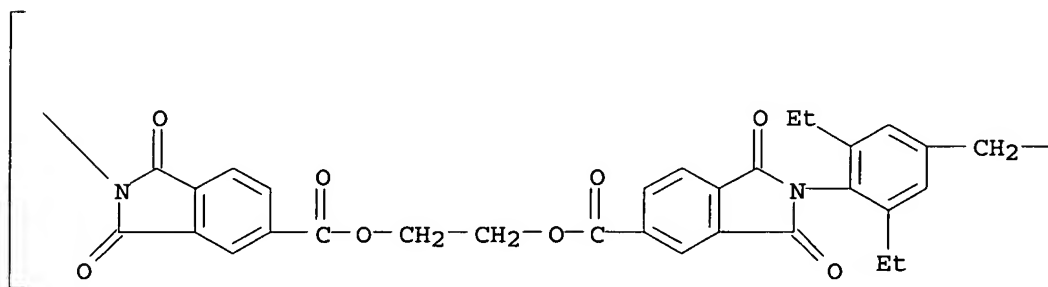


PAGE 1-B

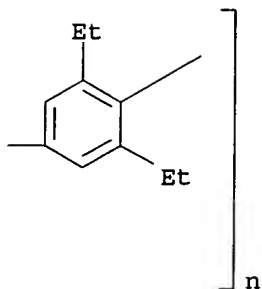


RN 182681-61-4 HCAPLUS
 CN Poly[(1,3-dihydro-1,3-dioxo-2H-isoindole-2,5-diyl)carbonyloxy-1,2-ethanediylloxycarbonyl(1,3-dihydro-1,3-dioxo-2H-isoindole-5,2-diyl)(2,6-diethyl-1,4-phenylene)methylene(3,5-diethyl-1,4-phenylene)] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM C09J179-08
ICS B32B007-12; C09J007-02; H01L023-50

CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 76

IT 26355-00-0P, 4,4'-Diaminodiphenyl ether-3,3',4,4'-
diphenylsulfonetetracarboxylic dianhydride copolymer
30969-13-2P, 4,4'-Diaminodiphenylmethane-3,3',4,4'-
diphenylsulfonetetracarboxylic dianhydride copolymer
33408-54-7P, 4,4'-Diaminodiphenyl sulfone-3,3',4,4'-diphenyl
sulfone tetracarboxylic dianhydride copolymer 34692-15-4P,
4,4'-Diaminodiphenyl sulfide-3,3',4,4'-
diphenylsulfonetetracarboxylic dianhydride copolymer, polyimide
sru 36247-77-5P, 4,4'-Diaminodiphenyl ether-3,3',4,4'-
diphenylsulfonetetracarboxylic dianhydride copolymer, polyimide
sru 113118-57-3P, 1,3-Bis(3-aminopropyl)-1,1,3,3-
tetramethyldisiloxane-3,3'-diaminodiphenylsulfone-3,3',4,4'-
diphenyl sulfone tetracarboxylic dianhydride copolymer
118486-12-7P, Bis[4-(4-aminophenoxy)phenyl]sulfone-3,3',4,4'-
diphenylsulfonetetracarboxylic dianhydride copolymer, sru
118486-19-4P, 4,4'-Bis(4-aminophenoxy)biphenyl-3,3',4,4'-diphenyl
sulfone tetracarboxylic dianhydride copolymer, polyimide sru
118570-14-2P, Bis[4-(4-aminophenoxy)phenyl]sulfone-3,3',4,4'-
diphenylsulfonetetracarboxylic dianhydride copolymer
118570-19-7P, 4,4'-Bis(4-aminophenoxy)biphenyl-3,3',4,4'-diphenyl
sulfone tetracarboxylic dianhydride copolymer 121150-79-6P,
2,2-Bis[4-(4-aminophenoxy)phenyl]propane-3,3',4,4'-
diphenylsulfonetetracarboxylic dianhydride copolymer
121150-82-1P, 2,2-Bis[4-(4-aminophenoxy)phenyl]propane-3,3',4,4'-
diphenylsulfonetetracarboxylic dianhydride copolymer, sru
123046-41-3P, 1,3-Bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane-
ethylene glycol bis(trimellitate) dianhydride-4,4'-
oxydianiline copolymer 124417-54-5P, 4,4'-Diaminodiphenylmethane-
3,3',4,4'-diphenylsulfonetetracarboxylic dianhydride copolymer,
polyimide sru 126305-02-0P, 1,3-Bis(4-aminophenoxy)benzene-1,3-
bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane-3,3',4,4'-
diphenyl sulfone tetracarboxylic dianhydride copolymer
155954-39-5P, 2,2-Bis[4-(4-aminophenoxy)phenyl]propane-1,3-bis(3-
aminopropyl)-1,1,3,3-tetramethyldisiloxane-3,3',4,4'-
diphenylsulfonetetracarboxylic dianhydride copolymer
158463-54-8P, Bis[4-(4-aminophenoxy)phenyl] sulfone-1,3-bis(3-
aminopropyl)-1,1,3,3-tetramethyldisiloxane-3,3',4,4'-diphenyl
sulfone tetracarboxylic dianhydride copolymer 182681-50-1P,
4,4'-Diamino-3,3',5,5'-tetramethyldiphenylmethane-3,3',4,4'-
diphenyl sulfone tetracarboxylic dianhydride copolymer
182681-51-2P, 4,4'-Diamino-3,3',5,5'-tetramethyldiphenylmethane-

3,3',4,4'-diphenyl sulfone tetracarboxylic dianhydride copolymer, polyimide sru 182681-53-4P, 4,4'-Diamino-3,3',5,5'-tetraethyldiphenylmethane-3,3',4,4'-diphenyl sulfone tetracarboxylic dianhydride copolymer 182681-54-5P, 4,4'-Diamino-3,3',5,5'-tetraethyldiphenylmethane-3,3',4,4'-diphenyl sulfone tetracarboxylic dianhydride copolymer, polyimide sru 182681-56-7P, 4,4'-Diamino-3,3',5,5'-tetramethyldiphenylmethane-ethylene glycol bis(trimellitate) dianhydride copolymer 182681-58-9P, 4,4'-Diamino-3,3',5,5'-tetramethyldiphenylmethane-ethylene glycol bis(trimellitate) dianhydride copolymer, polyimide sru 182681-60-3P, 4,4'-Diamino-3,3',5,5'-tetraethyldiphenylmethane-ethylene glycol bis(trimellitate) dianhydride copolymer 182681-61-4P, 4,4'-Diamino-3,3',5,5'-tetraethyldiphenylmethane-ethylene glycol bis(trimellitate) dianhydride copolymer, polyimide sru 182681-62-5P, 4,4'-Diamino-3,3',5,5'-tetraethyldiphenylmethane-3,3',4,4'-diphenylsulfonetetracarboxylic dianhydride-ethylene glycol bis(trimellitate) dianhydride copolymer 182681-70-5P 186972-40-7P 189070-46-0P, 1,3-Bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane-3,4'-diaminobiphenyl-3,3',4,4'-diphenyl sulfone tetracarboxylic dianhydride copolymer 189070-47-1P, 1,3-Bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane-4,4'-diaminodiphenylmethane-3,3',4,4'-diphenyl sulfone tetracarboxylic dianhydride copolymer 189070-48-2P, 1,3-Bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane-3,3',4,4'-diphenyl sulfone tetracarboxylic dianhydride-4,4'-oxydianiline copolymer 189070-49-3P, 1,3-Bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane-4,4'-diaminodiphenyl sulfide-3,3',4,4'-diphenyl sulfone tetracarboxylic dianhydride copolymer 189070-51-7P, 2,2-Bis(4-aminophenyl)propane-1,3-bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane-3,3',4,4'-diphenyl sulfone tetracarboxylic dianhydride copolymer 189070-52-8P, 2,2-Bis(4-aminophenyl)hexafluoropropane-1,3-bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane-3,3',4,4'-diphenyl sulfone tetracarboxylic dianhydride copolymer 189070-53-9P, 1,4-Bis(4-aminophenoxy)benzene-1,3-bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane-3,3',4,4'-diphenyl sulfone tetracarboxylic dianhydride copolymer 189070-54-0P, 1,3-Bis[1-(4-aminophenyl)-1-methylethyl]benzene-1,3-bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane-3,3',4,4'-diphenyl sulfone tetracarboxylic dianhydride copolymer 189070-55-1P, 4,4'-Bis(4-aminophenoxy)biphenyl-1,3-bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane-3,3',4,4'-diphenyl sulfone tetracarboxylic dianhydride copolymer 189070-56-2P 189070-57-3P, 2,2-Bis[4-(4-aminophenoxy)phenyl]hexafluoropropane-1,3-bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane-3,3',4,4'-diphenyl sulfone tetracarboxylic dianhydride copolymer 189070-59-5P, 1,3-Bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane-3,4'-diaminobiphenyl-ethylene glycol bis(trimellitate) dianhydride copolymer 189070-60-8P, 1,3-Bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane-4,4'-diaminodiphenylmethane-ethylene glycol bis(trimellitate) dianhydride copolymer 189070-61-9P, 1,3-Bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane-4,4'-diaminodiphenyl sulfide-ethylene glycol bis(trimellitate) dianhydride copolymer 189070-63-1P, 1,3-Bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane-2,2-bis(4-aminophenyl)propane-ethylene glycol bis(trimellitate) dianhydride copolymer 189070-64-2P, 2,2-Bis(4-aminophenyl)hexafluoropropane-1,3-bis(3-aminopropyl)-1,1,3,3-

tetramethyldisiloxane-ethylene glycol bis(trimellitate) dianhydride copolymer 189070-65-3P, 1,4-Bis(4-aminophenoxy)benzene-1,3-bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane-ethylene glycol bis(trimellitate) dianhydride copolymer 189070-66-4P, 1,3-Bis(4-aminophenoxy)benzene-1,3-bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane-ethylene glycol bis(trimellitate) dianhydride copolymer 189070-67-5P, 1,3-Bis[1-(4-aminophenyl)-1-methylethyl]benzene-1,3-bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane-ethylene glycol bis(trimellitate) dianhydride copolymer 189070-68-6P, 4,4'-Bis(4-aminophenoxy)biphenyl-1,3-bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane-ethylene glycol bis(trimellitate) dianhydride copolymer 189070-69-7P 189070-70-0P 189070-71-1P, 2,2-Bis[4-(4-aminophenoxy)phenyl]propane-1,3-bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane-ethylene glycol bis(trimellitate) dianhydride copolymer 189070-72-2P, 2,2-Bis[4-(4-aminophenoxy)phenyl]hexafluoropropane-1,3-bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane-ethylene glycol bis(trimellitate) dianhydride copolymer 189070-74-4P 209255-14-1P, 9,9-Bis(4-aminophenoxy)fluorene-1,3-bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane-3,3',4,4'-diphenyl sulfone tetracarboxylic dianhydride copolymer 209255-15-2P, 1,3-Bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane-3,3'-diaminodiphenyl sulfone-ethylene glycol bis(trimellitate) dianhydride copolymer 209255-16-3P, 9,9-Bis(4-aminophenoxy)fluorene-1,3-bis(3-aminopropyl)-1,1,3,3-tetramethyldisiloxane-ethylene glycol bis(trimellitate) dianhydride copolymer 210560-67-1P
(heat-resistant laminated adhesive tapes containing polyimides for semiconductor devices)

L32 ANSWER 42 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:178205 HCAPLUS

DOCUMENT NUMBER: 128:244769

TITLE: Organic binders for ceramic moldings, binder dispersions, green sheets, ceramic sintered body, and multilayer circuit ceramic substrates, and manufacture thereof

INVENTOR(S): Katsumura, Nobuhito; Shoji, Fusaji; Yagi, Kunihiro; Sengoku, Norio

PATENT ASSIGNEE(S): Hitachi, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

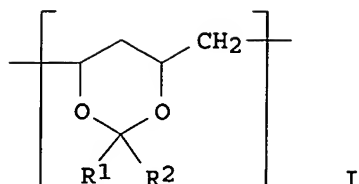
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------------|
| ----- | ---- | ----- | ----- | |
| JP 10072262 | A2 | 19980317 | JP 1997-162394 | 1997 0619 |
| PRIORITY APPLN. INFO.: | | | JP 1996-159483 | A 1996 0620 |

GI



AB The title binders providing green sheets of excellent flexibility, moldability, dispersibility, mech. strength, etc. comprise (A) poly(vinyl acetal) of 10-80% I unit and $\geq 10\%$ $-\text{CH}(\text{OR}_3)\text{CH}_2-$ unit ($\text{R}_1 = \text{H}$, C1-12 alkyl; $\text{R}_2 = \text{H}$, C1-12 alkyl, C3-8 cycloalkyl, aromatic group; $\text{R}_3 = \text{H}$, alkyl, aromatic group, acyl) and (B) water-soluble polymers. A binder dispersion was prepared from propylene glycol monomethyl ether, tripropylene glycol monobutyl ether, poly(vinyl butyral), poly(vinylpyrrolidone), and ion-exchanged water and used for making alumina green sheet.

IT 30581-59-0

(organic binders for ceramic moldings, binder dispersions, green sheets, ceramic sintered body, and multilayer circuit ceramic substrates, and manufacture thereof)

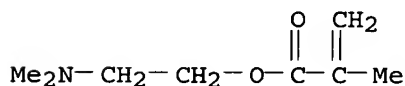
RN 30581-59-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2

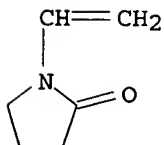
CMF C8 H15 N O2



CM 2

CRN 88-12-0

CMF C6 H9 N O



IC ICM C04B035-632

ICS C04B035-622; C08F008-12; C08L029-04; C08L029-14; C08L031-04; C08L033-02; C08L039-06; C08L071-02

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 57, 76

IT 9003-39-8, Poly(vinylpyrrolidone) 25322-68-3, Poly(ethylene

oxide) 25805-17-8, Poly(2-ethyloxazoline) 30581-59-0
(organic binders for ceramic moldings, binder dispersions, green
sheets, ceramic sintered body, and multilayer circuit ceramic
substrates, and manufacture thereof)

L32 ANSWER 43 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:371655 HCAPLUS

DOCUMENT NUMBER: 127:18934

TITLE: Polyester compositions and films with good
abrasion resistance and runnability

INVENTOR(S): Hayashi, Hajime; Odajima, Akio

PATENT ASSIGNEE(S): Toray Industries, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. ----- | KIND ---- | DATE ----- | APPLICATION NO. ----- | DATE |
|------------------------|--------------|---------------|--------------------------|--------------|
| JP 09087493 | A2 | 19970331 | JP 1995-239807 | 1995 0919 |
| JP 3395478 | B2 | 20030414 | | |
| PRIORITY APPLN. INFO.: | | | JP 1995-239807 | 1995 0919 |

AB The compns. maintaining a uniform mono-dispersion of highly
crosslinked polymer particles at melting state comprise (A) aromatic
polyesters, (B) crosslinked polymer particles with crosslinking
ratio $\geq 50\%$, and (C) water-soluble polymers, where a covering
ratio is defined as $s = w \times r$ and $s \geq 0.15$; $w = \%$ added amount
of water soluble polymers with respect to the crosslinked particles;
 $r =$ average radius of crosslinked particles. A composition contained PET,
crosslinked ethylvinylbenzene-divinylbenzene copolymer particles,
and poly(vinylpyrrolidone).

IT 25086-89-9, Vinylpyrrolidone-vinyl acetate copolymer

28062-44-4, Vinylpyrrolidone-acrylic acid copolymer
(polyester compns. for films with good abrasion resistance and
runnability)

RN 25086-89-9 HCAPLUS

CN Acetic acid ethenyl ester, polymer with 1-ethenyl-2-pyrrolidinone
(9CI) (CA INDEX NAME)

CM 1

CRN 108-05-4

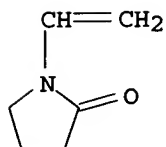
CMF C4 H6 O2

AcO-CH=CH₂

CM 2

CRN 88-12-0

CMF C6 H9 N O



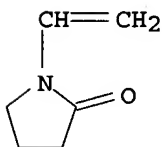
RN 28062-44-4 HCAPLUS

CN 2-Propenoic acid, polymer with 1-ethenyl-2-pyrrolidinone (9CI)
(CA INDEX NAME)

CM 1

CRN 88-12-0

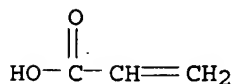
CMF C6 H9 N O



CM 2

CRN 79-10-7

CMF C3 H4 O2



IC ICM C08L067-02

ICS B29C055-12; B32B027-36; C08J005-18; C08L067-02; C08L025-08;
C08L039-06; B29K067-00; B29L007-00

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 76

IT 25038-59-9, PET polyester, uses 25086-89-9,

Vinylpyrrolidone-vinyl acetate copolymer 25822-53-1, Ethylene
glycol-terephthalic acid-5-sodiosulfoisophthalic acid
copolymer 28062-44-4, Vinylpyrrolidone-acrylic acid
copolymer(polyester compns. for films with good abrasion resistance and
runnability)

L32 ANSWER 44 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:96675 HCAPLUS

DOCUMENT NUMBER: 126:105255

TITLE: Pressure-sensitive adhesive sheets for removal
of resist residue by laminating and
peeling-offINVENTOR(S): Kihara, Yasuo; Aizawa, Kaoru; Shimodan,
Hideaki; Namikawa, Akira

PATENT ASSIGNEE(S): Nitto Denko Corp, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|--------------|
| JP 08302309 | A2 | 19961119 | JP 1995-129326 | 1995 0427 |

PRIORITY APPLN. INFO.:

JP 1995-129326

1995
0427

AB Title sheets consist of film supports and curable adhesives containing
 (A) nonvolatile compds. containing ≥ 1 unsatd. double bond and
 (B) pressure-sensitive adhesive polymers having 20-100%
 homopolymers of hydrophilic monomers showing water solubility (maximum weight
 soluble in water) ≥ 30 g/100 g or copolymers including
 $\geq 20\%$ of the monomers. The sheets are laminated on
 substrates having a resist pattern, i.e., semiconductor devices,
 printed circuit boards, lead frames, etc., then, after curing of
 the adhesives, the sheets associated with the resists are peeled off.
 Thus, 100 g solution of 40:60 N-vinyl-2-pyrrolidone-2-methoxyethyl
 acrylate copolymer in a mixture of 150 g MeOH and 100 g water, 5.6 g
 tetraethylene glycol dimethacrylate, 5.6 g octaethylene
 glycol diacrylate, 7.2 g tetramethylolmethane triacrylate,
 0.8 g Irgacure 184, and 13 g MeOH were mixed, applied on a
 polyester film, and dried at 145° for 5 min to give title
 sheet, which was laminated on a wafer having a resist pattern
 comprising a novolak and a quinonediazide, pressed at room temperature,
 heated at 120° for 3 min, UV-irradiated then the sheet was
 removed to show no resist residue left on the wafer.

IT 68083-91-0P 185960-24-1P

(hydrophilic; pressure-sensitive adhesive tapes containing
 hydrophilic polymers and photocurable components for removal of
 resists)

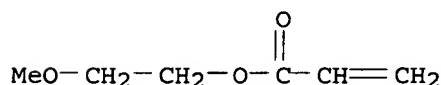
RN 68083-91-0 HCAPLUS

CN 2-Propenoic acid, 2-methoxyethyl ester, polymer with
 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 3121-61-7

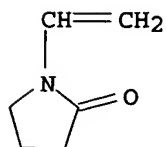
CMF C6 H10 O3



CM 2

CRN 88-12-0

CMF C6 H9 N O



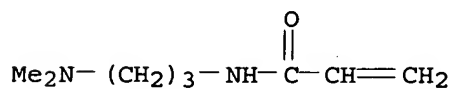
RN 185960-24-1 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with N-[3-(dimethylamino)propyl]-2-propenamide and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 3845-76-9

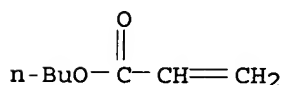
CMF C8 H16 N2 O



CM 2

CRN 141-32-2

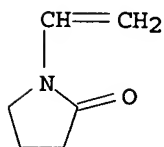
CMF C7 H12 O2



CM 3

CRN 88-12-0

CMF C6 H9 N O



IC ICM C09J007-02

ICS C09J007-02; H01L021-027

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 74, 76

ST pressure sensitive adhesive resist removal; hydrophilic monomer polymer adhesive; nonvolatile unsatd compd adhesive; vinylpyrrolidone methoxyethyl acrylate copolymer adhesive; tetraethylene glycol dimethacrylate polymer adhesive;

octaethylene glycol diacrylate polymer adhesive;
tetramethylolmethane triacrylate pressure sensitive adhesive;
wafer photoresist removal adhesive sheet

IT 25119-83-9P, Acrylic acid-butyl acrylate copolymer

68083-91-0P 185960-24-1P 185960-25-2P

(hydrophilic; pressure-sensitive adhesive tapes containing hydrophilic polymers and photocurable components for removal of resists)

IT 2358-84-1DP, Diethylene glycol dimethacrylate, reaction products with epoxy acrylate, dodecaethylene diacrylate, and ethylhexyl acrylate-hydroxyethyl acrylate-methacrylic acid copolymer 26570-48-9DP, reaction products with epoxy acrylate, diethylene glycol dimethacrylate, and ethylhexyl acrylate-hydroxyethyl acrylate-methacrylic acid copolymer 79587-04-5DP, 2-Ethylhexyl acrylate-2-hydroxyethyl acrylate-methacrylic acid copolymer, reaction products with epoxy acrylate, dodecaethylene glycol diacrylate, and diethylene glycol dimethacrylate 185960-26-3P (pressure-sensitive adhesive tapes containing hydrophilic polymers and photocurable components for removal of resists)

L32 ANSWER 45 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:66863 HCAPLUS

DOCUMENT NUMBER: 126:76263

TITLE: Waterproof hydrophilization

compositions and aluminum

heat-exchanger parts coated therewith

INVENTOR(S): Mesaki, Masakazu; Maezono, Toshiki; Ito, Takakazu; Fujimura, Shunichi

PATENT ASSIGNEE(S): Furukawa Electric Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|------|
| ----- | ---- | ----- | ----- | |
| JP 08291269 | A2 | 19961105 | JP 1995-250100 | |

1995
0905

PRIORITY APPLN. INFO.: JP 1995-59743 A
1995
0223

AB The title compns. comprise (A) acrylic acid-vinylpyrrolidone copolymer (I), (B) polyethylene glycol diglycidyl ether (II) at A/B ratio 20/80-70/30, (C) 0.05-1.0 part (vs. 100 parts A + B) amines, and optionally (D) powdered lubricants, (E) 5-80 parts (as solids, vs. 100 parts A + B) polystyrenesulfonic acids or their salts, and (F) polyethylene glycol. Thus, an aqueous dispersion containing I 45, II 55, and Me3N 0.3 part was applied on a chromated Al plate and baked to form a coating showing contact angle 15°, good water resistance, and no odor.

IT 185392-89-6P

(waterproof hydrophilization acrylic acid -vinylpyrrolidone copolymer-polyethylene glycol

diglycidyl ether **compns.** for coating aluminum
heat-exchanger parts)

RN 185392-89-6 HCAPLUS

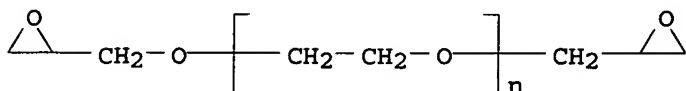
CN 2-Propenoic acid, polymer with 1-ethenyl-2-pyrrolidinone and
 α -(oxiranylmethyl)- ω -(oxiranylmethoxy)poly(oxy-1,2-
ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 26403-72-5

CMF (C2 H4 O)_n C6 H10 O3

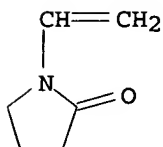
CCI PMS



CM 2

CRN 88-12-0

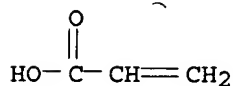
CMF C6 H9 N O



CM 3

CRN 79-10-7

CMF C3 H4 O2



IC ICM C09D133-02

ICS C09D125-18; C09D139-06; C09D163-00; C09D171-00

CC 42-10 (Coatings, Inks, and Related Products)

Section cross-reference(s): 56

IT Crosslinking catalysts

(amines; waterproof hydrophilization acrylic
acid-vinylpyrrolidone copolymer-polyethylene glycol diglycidyl
ether **compns.** for coating aluminum heat-exchanger
parts)

IT Amines, uses

(crosslinking catalysts; waterproof hydrophilization acrylic
acid-vinylpyrrolidone copolymer-polyethylene glycol diglycidyl
ether **compns.** for coating aluminum heat-exchanger
parts)

IT Coating materials

- (water-resistant; waterproof hydrophilization acrylic acid-vinylpyrrolidone copolymer-polyethylene glycol diglycidyl ether **compns.** for coating aluminum heat-exchanger parts)
- IT Heat exchangers
Lubricants
Wettability
(waterproof hydrophilization acrylic acid-vinylpyrrolidone copolymer-polyethylene glycol diglycidyl ether **compns** . for coating aluminum heat-exchanger parts)
- IT 124-26-5, Stearic acid amide
(Amide AP; waterproof hydrophilization acrylic acid-vinylpyrrolidone copolymer-polyethylene glycol diglycidyl ether **compns.** for coating aluminum heat-exchanger parts)
- IT 75-50-3, Trimethylamine, uses 102-69-2, Tripropylamine
102-71-6, Triethanolamine, uses 121-44-8, Triethylamine, uses
280-57-9, Dabco 14002-32-5, Trimethanolamine
(crosslinking catalysts; waterproof hydrophilization acrylic acid-vinylpyrrolidone copolymer-polyethylene glycol diglycidyl ether **compns.** for coating aluminum heat-exchanger parts)
- IT 9002-88-4, Sanwax E 320 25151-31-9, Slipacks ZSA 25322-68-3,
Polyethylene glycol 37437-26-6, Slipacks PST
(lubricants; waterproof hydrophilization acrylic acid-vinylpyrrolidone copolymer-polyethylene glycol diglycidyl ether **compns.** for coating aluminum heat-exchanger parts)
- IT 185392-89-6P
(waterproof hydrophilization acrylic acid -vinylpyrrolidone copolymer-polyethylene glycol diglycidyl ether **compns.** for coating aluminum heat-exchanger parts)
- IT 25053-27-4, Sodium polyethylenesulfonate
(waterproof hydrophilization acrylic acid-vinylpyrrolidone copolymer-polyethylene glycol diglycidyl ether **compns** . for coating aluminum heat-exchanger parts)
- IT 7429-90-5, Aluminum, miscellaneous
(waterproof hydrophilization acrylic acid-vinylpyrrolidone copolymer-polyethylene glycol diglycidyl ether **compns** . for coating aluminum heat-exchanger parts)

L32 ANSWER 46 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:660714 HCAPLUS

DOCUMENT NUMBER: 125:290781

TITLE: Manufacture of printed circuit boards by electrophotography

INVENTOR(S): Inoe, Wakana; Hyodo, Kenji

PATENT ASSIGNEE(S): Mitsubishi Paper Mills Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|------|
| JP 08211639 | A2 | 19960820 | JP 1995-18233 | |

1995
0206

PRIORITY APPLN. INFO.:

JP 1995-18233

1995
0206

AB The manufacture of a printed circuit comprises formation of (A) a photoconductor layer on an elec. **conductor** layer laminated on an elec. insulating board, (B) formation of a toner image on the photoconductor layer by electrophotog., (C) eluting the photoconductor layer area without the image, (D) etching the elec. **conductor** layer of the eluted photoconductor area, and (E) removing the remaining photoconductor layer and a toner image as require and the manufacture is characterized by the use of a photoconductive resin containing (a) 10-90% a polymerizable monomer having a carbazole group and/or a polymerizable monomer having a phthalocyanine group as a polymerizable component and (b) 10-40% polymerizable monomers having an anionic functional group for the photoconductor layer.

IT **182865-09-4P**, Cobalt phthalocyaninetetracarboxylic acid tetraester with ethylene **glycol**, acrylate, polymer with **acrylic acid**, butyl methacrylate, and butyl acrylate

(manufacture of printed circuit boards by electrophotog.)

RN 182865-09-4 HCAPLUS

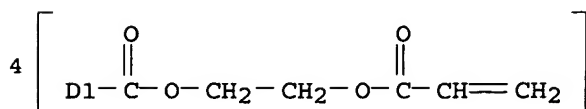
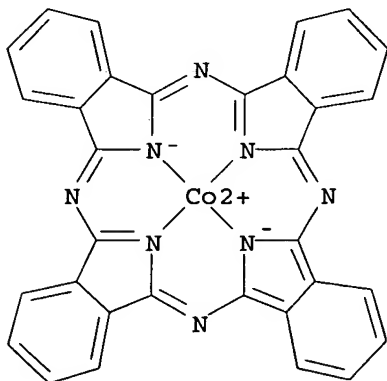
CN Cobalt, [tetrakis[2-[(1-oxo-2-propenyl)oxy]ethyl] 29H,31H-phthalocyanine-C,C,C,C-tetracarboxylato(2-)-N29,N30,N31,N32]-, polymer with butyl 2-methyl-2-propenoate, butyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

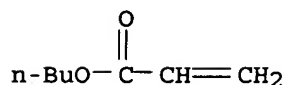
CRN 101240-49-7

CMF C56 H40 Co N8 O16

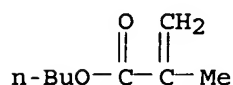
CCI CCS, IDS



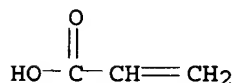
CM 2

CRN 141-32-2
CMF C7 H12 O2

CM 3

CRN 97-88-1
CMF C8 H14 O2

CM 4

CRN 79-10-7
CMF C3 H4 O2

IC ICM G03G005-07
ICS G03G005-06; H05K001-09; H05K003-06; H05K003-24
CC 76-3 (**E**lectric Phenomena)
Section cross-reference(s): 38, 74
IT 182865-04-9P, Acrylic acid-butyl methacrylate-9-vinylcarbazole copolymer 182865-05-0P, Butyl methacrylate-methacrylic acid-9-vinylcarbazole copolymer 182865-06-1P, Acrylic acid-butyl methacrylate-4-nitro-9-vinylcarbazole copolymer 182865-07-2P, Cobalt phthalocyaninetetracarboxylic acid tetraester with ethylene glycol, acrylate, polymer with 9-vinylcarbazole, methacrylic acid, butyl methacrylate, and butyl acrylate 182865-08-3P, Cobalt phthalocyaninetetracarboxylic acid tetraester with ethylene glycol, acrylate, polymer with methacrylic acid, butyl methacrylate, and butyl acrylate **182865-09-4P**, Cobalt phthalocyaninetetracarboxylic acid tetraester with ethylene glycol, acrylate, polymer with **acrylic acid**, butyl methacrylate, and butyl acrylate 182865-10-7P, Butyl methacrylate-methacrylic acid-4-nitro-9-vinylcarbazole copolymer
(manufacture of printed circuit boards by electrophotog.)

L32 ANSWER 47 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1996:583557 HCAPLUS
DOCUMENT NUMBER: 125:198139

TITLE: Polyether imide-polyphenylene ether-polyester blends as insulators for electronic parts
INVENTOR(S): Iwafune, Kyotoshi; Mizoguchi, Takashi
PATENT ASSIGNEE(S): Cosmo Sogo Kenkyusho Kk, Japan; Cosmo Oil Co Ltd
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|------|
| JP 08176435 | A2 | 19960709 | JP 1994-337230 | |

1994
1226

PRIORITY APPLN. INFO.: JP 1994-337230

1994
1226

AB Polymer compns. with good fluidity, mech. and dielec. properties, and heat resistance contain polyether imides, polyphenylene ethers, and aromatic polyesters. Thus, a blend of Ultem 1010-1000 45.0, poly(2,6-dimethyl-p-phenylene ether) 45.0, polyester comprising [p-OC₆H₄CO] and [2,6-OC₁₀H₆CO] 10, and compatibilizer 5.0 part showed melt flow index 8.1 g/10 min, HDT 178°, tensile strength 1090 kg/cm², tensile elasticity 36,000 kg/cm², bending strength 1330 kg/cm², flexural modulus 30,000 kg/cm², dielec. constant 2.80, and dielec. loss tangent 0.0039.

IT 156995-00-5

(polyether imide-polyphenylene ether-polyester blends as insulators for electronic parts)

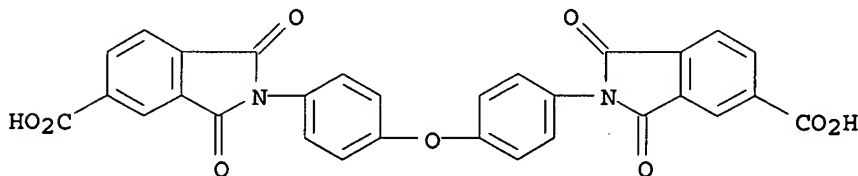
RN 156995-00-5 HCAPLUS

CN 2,6-Naphthalenedicarboxylic acid, polymer with 1,4-benzenediol, 4-hydroxybenzoic acid and 2,2'-(oxydi-4,1-phenylene)bis[2,3-dihydro-1,3-dioxo-1H-isoindole-5-carboxylic acid] (9CI) (CA INDEX NAME)

CM 1

CRN 27744-81-6

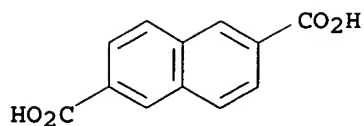
CMF C30 H16 N2 O9



CM 2

CRN 1141-38-4

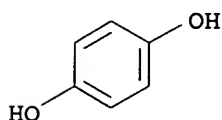
CMF C12 H8 O4



CM 3

CRN 123-31-9

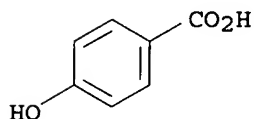
CMF C6 H6 O2



CM 4

CRN 99-96-7

CMF C7 H6 O3



IC ICM C08L079-08
ICS C08L067-02; C08L071-12; H01B003-30
ICA H05K001-03
CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 76
IT 24938-67-8, Poly(2,6-dimethyl-p-phenylene ether) 25134-01-4,
2,6-Dimethylphenol homopolymer 25822-54-2, Ethylene
glycol-4-hydroxybenzoic acid-terephthalic acid copolymer
31072-56-7, 4,4'-Biphenyldiol-4-hydroxybenzoic acid-terephthalic
acid copolymer 61128-24-3, Ultem 1010-1000 67203-03-6,
2,5-Biphenyldiol-terephthalic acid copolymer 81843-52-9,
4-Hydroxybenzoic acid-6-hydroxy-2-naphthalenecarboxylic acid
copolymer 86013-05-0, Ethylene glycol-4-hydroxybenzoic
acid-2,6-naphthalenedicarboxylic acid copolymer 102772-34-9
156995-00-5 181303-85-5 181303-86-6 181303-87-7
(polyether imide-polyphenylene ether-polyester blends as
insulators for electronic parts)

L32 ANSWER 48 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:446330 HCAPLUS

DOCUMENT NUMBER: 125:100181

TITLE: Water-soluble film-forming material for
lithographyINVENTOR(S): Watanabe, Satoshi; Ishihara, Toshinobu;
Takeda, Yoshifumi; Oikawa, Katsuyuki

PATENT ASSIGNEE(S): Shinetsu Chemical Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|--------------|
| ----- | --- | ----- | ----- | |
| JP 08095253 | A2 | 19960412 | JP 1994-252849 | 1994 0921 |
| JP 2985688 | B2 | 19991206 | | |
| US 5529888 | A | 19960625 | US 1995-531328 | 1995 0920 |
| KR 195287 | B1 | 19990615 | KR 1995-30904 | 1995 0920 |

PRIORITY APPLN. INFO.: JP 1994-252849 A
 1994
 0921

AB The material, for reflection-preventing and protective layers on chemical amplification resist layers, consists of a (20-70):(80-30) mixture of (A) a water-soluble copolymer of N-vinylpyrrolidone and other vinyl monomers and (B) a F-containing organic acid. The material is useful for manufacture of semiconductor integrated circuits by lithog. The material gives a film with good dimensional stability.

IT 25086-89-9, Luviskol VA 64 27155-03-9
 28062-44-4, Acrylic acid-N-vinylpyrrolidone copolymer
 (water-soluble film-forming material containing vinylpyrrolidone copolymer and fluorine-containing organic acid for lithog.)

RN 25086-89-9 HCAPLUS

CN Acetic acid ethenyl ester, polymer with 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 108-05-4

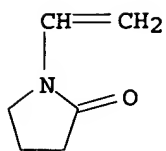
CMF C4 H6 O2

AcO-CH=CH₂

CM 2

CRN 88-12-0

CMF C6 H9 N O



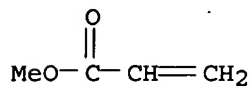
RN 27155-03-9 HCAPLUS

CN 2-Propenoic acid, methyl ester, polymer with 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 96-33-3

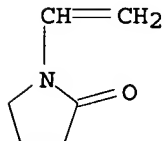
CMF C4 H6 O2



CM 2

CRN 88-12-0

CMF C6 H9 N O



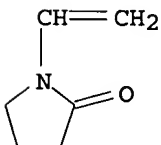
RN 28062-44-4 HCAPLUS

CN 2-Propenoic acid, polymer with 1-ethenyl-2-pyrrolidinone (9CI)
(CA INDEX NAME)

CM 1

CRN 88-12-0

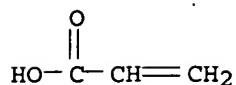
CMF C6 H9 N O



CM 2

CRN 79-10-7

CMF C3 H4 O2



IC ICM G03F007-11
ICS H01L021-027
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 76
IT 25086-89-9, Luviskol VA 64 26008-54-8, Vinyl alcohol-N-vinylpyrrolidone copolymer 27155-03-9
28062-44-4, Acrylic acid-N-vinylpyrrolidone copolymer (water-soluble film-forming material containing vinylpyrrolidone copolymer and fluorine-containing organic acid for lithog.)

L32 ANSWER 49 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:890655 HCAPLUS

DOCUMENT NUMBER: 124:58387

TITLE: Adhesive compositions with flexibility in B-stage and low thermal expansion coefficient, their composites, and printed circuit boards

INVENTOR(S): Sugyama, Hiroyasu; Hibino, Yutaka

PATENT ASSIGNEE(S): Sumitomo Electric Industries, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|--------------|
| JP 07224269 | A2 | 19950822 | JP 1994-40476 | 1994 0214 |

PRIORITY APPLN. INFO.: JP 1994-40476

1994
0214

AB Title adhesive compns. contain (A) 100 parts imide oligomers having ≥ 2 amine groups in a mol., (B) 50-200 parts epoxy compds. having ≥ 2 epoxy groups in a mol., (C) 10-80 parts bismaleimide-triazine resin compds., and (D) 5-80 parts nitrile rubber component. Composites are obtained by impregnating the above compns. into glass fiber fabrics or coating the above compns. on polyimide films. Printed circuit boards are obtained by using the above compns. and composites. Thus, an adhesive composition containing SM 20 (imide oligomer) 100, Epiclone 50, BT Resin BT 2100 (bismaleimide-triazine resin) 40, and Nipol DN 601 30 parts showed less thermal expansion coefficient after curing and good flexibility in B-stage.

IT 25655-01-0, SM 20
(adhesive compns. with flexibility in B-stage and less thermal expansion coefficient, their composites, and printed circuit boards)

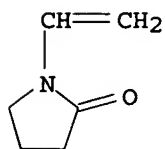
RN 25655-01-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 88-12-0

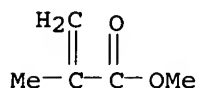
CMF C6 H9 N O



CM 2

CRN 80-62-6

CMF C5 H8 O2



IC ICM C09J163-00

ICS B32B015-08; C08G059-50; C08L063-00; C08L079-08; C09J109-02;
C09J179-08; H05K001-03

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 76

ST imide oligomer blend adhesive; epoxy resin blend adhesive;
bismaleimide triazine resin blend adhesive; **nitrile**
rubber blend adhesive; composite adhesive compn; printed circuit
board adhesive compnIT Rubber, **nitrile**, uses(carboxy-containing, Nipol DN 601; adhesive compns. with
flexibility in B-stage and less thermal expansion coefficient, their
composites, and printed circuit boards)

IT 25655-01-0, SM 20 53323-20-9, Epiclon 68508-55-4, BT

Resin BT 2100 172451-16-0, Araldite ENC 1273

(adhesive compns. with flexibility in B-stage and less thermal
expansion coefficient, their composites, and printed circuit boards)

L32 ANSWER 50 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1988:439137 HCAPLUS

DOCUMENT NUMBER: 109:39137

TITLE: Electrically **conductive** and
pressure-sensitive adhesive
compositions for biomedical electrodes

PATENT ASSIGNEE(S): Minnesota Mining and Manufacturing Co., USA

SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|-------|-----------------|------|
| ----- | ---- | ----- | ----- | |

| | | | | |
|-------------------------------|----|----------|----------------|-------------------|
| JP 63069880 | A2 | 19880329 | JP 1987-209438 | 1987 0825 |
| JP 08019394 | B4 | 19960228 | | |
| IN 168079 | A | 19910202 | IN 1986-MA738 | 1986 0918 |
| AU 8774648 | A1 | 19880310 | AU 1987-74648 | 1987 0624 |
| AU 596428 | B2 | 19900503 | | |
| CA 1327858 | A1 | 19940315 | CA 1987-541686 | 1987 0709 |
| EP 263586 | A2 | 19880413 | EP 1987-307429 | 1987 0821 |
| EP 263586 | A3 | 19880601 | | |
| EP 263586 | B1 | 19951011 | | |
| R: DE, ES, FR, GB, IT, NL, SE | | | | |
| ES 2077558 | T3 | 19951201 | ES 1987-307429 | 1987 0821 |
| PRIORITY APPLN. INFO.: | | | US 1986-902396 | A 1986 0905 |

AB The title **compns.** comprise ≥ 1 water-soluble hydrogen donor monomers and ≥ 1 water-soluble hydrogen acceptor monomers with initiators containing water-soluble polar organic compds. 0-98, water 2-100, and water-soluble salts 0-12%. These **compns.** have 12-50% solids content and 5-95% of the hydrogen donor has been neutralized. A mixture of acrylic acid (I) 10, N-vinylpyrrolidone (II) 10, glycerol (III) 50.6, water 25.5, Irgacure 651 (III) 0.07, triethyleneglycerol bismethacrylate (V) 0.125, KCl 1.0, and NaOH 2.77 parts was coated onto a Sn-polyester laminate and exhibited good adhesion with the Sn and had impedance 900 Ω at 10 Hz.

IT 115239-50-4, **Acrylic acid-N-vinyl pyrrolidone-triethylene glycol bismethacrylate** copolymer
115239-51-5, **Acrylic acid-N-vinyl pyrrolidone-triethylene glycol bismethacrylate** copolymer
sodium salt

(adhesives, elec. **conductive** and pressure-sensitive, for biomedical electrodes)

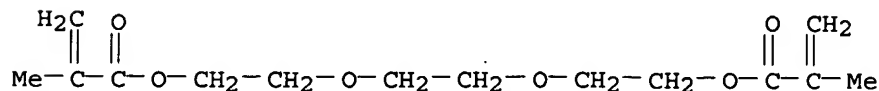
RN 115239-50-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester, polymer with 1-ethenyl-2-pyrrolidinone and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 109-16-0

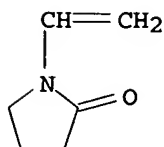
CMF C14 H22 O6



CM 2

CRN 88-12-0

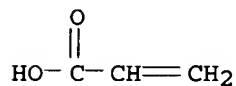
CMF C6 H9 N O



CM 3

CRN 79-10-7

CMF C3 H4 O2



RN 115239-51-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediylbis(oxy-2,1-ethanediyl)
 ester, polymer with 1-ethenyl-2-pyrrolidinone and 2-propenoic
 acid, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 115239-50-4

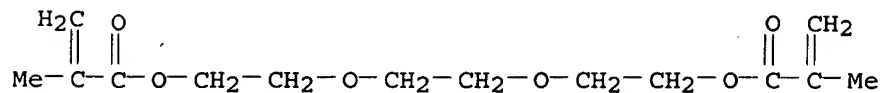
CMF (C14 H22 O6 . C6 H9 N O . C3 H4 O2)x

CCI PMS

CM 2

CRN 109-16-0

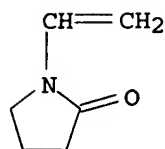
CMF C14 H22 O6



CM 3

CRN 88-12-0

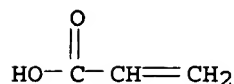
CMF C6 H9 N O



CM 4

CRN 79-10-7

CMF C3 H4 O2



IC ICM C09J003-14
ICS A61B005-04; C09J007-02

CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 63, 76

ST acrylic acid copolymer adhesive electrode; vinyl pyrrolidone copolymer adhesive electrode; ethylene glycol bismethacrylate electrode adhesive; elec **conductive** acrylate electrode adhesive; pressure sensitive electrode adhesive **cond**

IT Electric **conductors**
(adhesive, acrylic acid-vinylpyrrolidone-acrylate copolymer and its salt, for biomedical electrodes)

IT Adhesives
(elec. **conductive**, acrylic acid-vinylpyrrolidone-acrylate copolymer and its salt, for biomedical electrodes)

IT Adhesives
(pressure-sensitive, acrylic acid-vinylpyrrolidone-acrylate copolymer and its salt, elec. **conductive**, for biomedical electrodes)

IT 26793-35-1 115239-44-6 115239-46-8 115239-47-9 115239-48-0
115239-49-1 115239-50-4, **Acrylic acid**
-N-vinyl pyrrolidone-triethylene glycol bismethacrylate copolymer 115239-51-5, **Acrylic acid**
-N-vinyl pyrrolidone-triethylene glycol bismethacrylate copolymer sodium salt
(adhesives, elec. **conductive** and pressure-sensitive, for biomedical electrodes)

IT 24650-42-8
(electrode adhesives containing, pressure-sensitive, with good elec. **conductivity**)

L32 ANSWER 51 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1985:62820 HCAPLUS

DOCUMENT NUMBER: 102:62820

TITLE: Interpolymer complexes of random acrylic acid-methyl methacrylate copolymer with poly(vinylpyrrolidinone) and polyethylene glycol in solutions

AUTHOR(S): Frolova, V. A.; Bimendina, L. A.; Bekturov, E. A.

CORPORATE SOURCE: Inst. Khim. Nauk, Alma-Ata, USSR

SOURCE: Izvestiya Akademii Nauk Kazakhskoi SSR, Seriya Khimicheskaya (1984), (6), 47-51
CODEN: IKAKAK; ISSN: 0002-3205

DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB Formation of complexes of random **acrylic acid** -Me methacrylate copolymer (I) with poly(vinylpyrrolidinone) (II) or polyethylene glycol (III) in solns. was demonstrated by **conductometric** and potentiometric titration and viscometry. The I-II complexes [94524-99-9] were more stable than the I-III complexes [94592-76-4], and complexes formed in polar organic solvents were less stable than those formed in water. The existence of a lower critical mol. weight of III (15 + 103) was established for the system I-III. A decrease in the content of active groups in random I [content of **acrylic acid** units 73.8 mol % vs. 89.7 mol % (F. et al., 1983)] resulted in formation of less stable complexes.

CC 36-6 (Physical Properties of Synthetic High Polymers)

ST acrylic acid copolymer complex; methyl methacrylate copolymer complex; polyvinylpyrrolidinone complex acrylic acid copolymer; polyoxyethylene complex acrylic acid copolymer; complex polymer **compn** property stability; solvent effect polymer complex stability

L32 ANSWER 52 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1984:598233 HCAPLUS
DOCUMENT NUMBER: 101:198233
TITLE: Contact lens and **compositions**
INVENTOR(S): Hoefer, Peter; Mueller, Ulrich; Baerenz, Manfred; Schaefer, Horst; Mueller-Lierheim, Wolfgang
PATENT ASSIGNEE(S): Titmus Eurocon Kontaktlinsen G.m.b.H. und Co. K.-G., Fed. Rep. Ger.
SOURCE: U.S., 5 pp. Cont. of U.S. Ser. No. 226,674, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|--------------------|
| ----- | ---- | ----- | ----- | |
| US 4463148 | A | 19840731 | US 1983-490209 | 1983 0506 |
| JP 04054203 | B4 | 19920828 | JP 1981-10091 | 1981 0126 |
| US 5069542 | A | 19911203 | US 1988-186674 | 1988 0421 |
| PRIORITY APPLN. INFO.: | | | DE 1980-3002664 | A 1980 0125 |
| | | | US 1981-226674 | A1 1981 0121 |

US 1980-187905

B1

1980

0917

AB Soft contact lenses consist of a copolymer comprising 2-hydroxyethyl methacrylate, 1 or more unsatd. **carboxylic acids**, 1 or more base monomers, aliphatic acrylate or methacrylate, and dialkylene **glycol** dimethacrylate crosslinker 50-90, 2-20, 2-20, 5-25, and 0.1-1.0%, resp. The 5-component **composition** has an extremely high tensile strength, ensures a uniform degree of expansion over the entire lens body, and permits a water content of 40-9% (preferably 60%), depending on the proportion of other components. Thus, a lens material consisted of 2-hydroxyethyl methacrylate-vinylpyrrolidone-methacrylic acid-Bu methacrylate-triethylene **glycol** dimethacrylate copolymer [92708-41-3] (77.8, 3.4, 5.2, 12.9, and 0.7%, resp., by weight). In the nonhydrated state, the lens has a diameter of 9.19 mm, a level width of 0.15 mm, a numerical eccentricity of the elliptical inside surface 0.36, and a water content of the hydrated lens of 59%.

IC C08F220-20; G02C007-04

INCL 526264000

CC 63-7 (Pharmaceuticals)

L32 ANSWER 53 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1980:78298 HCAPLUS

DOCUMENT NUMBER: 92:78298

TITLE: Coating materials for transparent plastic moldings

INVENTOR(S): Kaetsu, Isao; Kumakura, Minoru; Yoshida, Masaru; Urabe, Masanobu

PATENT ASSIGNEE(S): Japan Atomic Energy Research Institute, Japan; Nippon Kogaku K. K.

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|--------------|
| JP 54119599 | A2 | 19790917 | JP 1978-27497 | 1978 0310 |

PRIORITY APPLN. INFO.:

JP 1978-27497

A

1978
0310

AB Compds. of hydrolyzed aminoalkyldialkoxysilane and (meth)acryloyloxyalkyldialkoxysilane or vinylalkoxysilane, 3-mercaptopropyltrimethoxysilane (I), and copolymers from (meth)acrylate esters, vinylpyrrolidinone, and (or) **acrylic acid** are applied to transparent plastic moldings to form scratch-resistant coatings. Thus, a mixture of 3-(2-aminoethylamino)propyltrimethoxysilane 17.5, 3-(methacryloyloxy)propyltrimethoxysilane 17.5, H₂O 15, MeOH 50, and HCl 0.05 part was stirred at room temperature A **composition** of

the above hydrolyzed product 80, I 2, and 2:5:5:10 acrylic acid-2-hydroxyethyl acrylate-2-hydroxyethyl methacrylate-N-vinyl-2-pyrrolidinone copolymer [72642-13-8] 22 parts was applied to a poly[diethylene glycol bis(allyl carbonate)] [25656-90-0] sheet to form a transparent antistatic coating.

IC C08G077-26

CC 42-10 (Coatings, Inks, and Related Products)

L32 ANSWER 54 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1976:530527 HCAPLUS

DOCUMENT NUMBER: 85:130527

TITLE: Polymeric carriers for ophthalmological drug forms

PATENT ASSIGNEE(S): All-Union Scientific Research Institute of Medical Technology, USSR

SOURCE: Ger. Offen., 11 pp. Division of Ger. 2,251,076.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------------|
| ----- | ---- | ----- | ----- | |
| DE 2265164 | A1 | 19760715 | DE 1972-2265164 | 1972 1018 |
| DE 2265164 | B2 | 19791115 | | |
| DE 2265164 | C3 | 19850822 | | |
| PRIORITY APPLN. INFO.: | | | DE 1972-2265164 | A 1972 1018 |

AB Polymeric carriers for ophthalmol. drug compns. comprised an aqueous or aqueous-alc. solution of an acrylic acid amide homopolymer with mol. weight 30,000-1,000,000 and/or a copolymer of acrylamide with unsatd. compds. (copolymer mol. weight 20,000-500,000), and 10-90% acrylamide segments. For example, an ophthalmol. polymeric base compn. was prepared by mixing 6.0 g acrylamide-vinyl acetate-N-vinylpyrrolidone copolymer [52857-70-2] and 4.0 g polyacrylamide [9003-05-8] with 45 g EtOH and 45 g H2O.

IC C08F020-56

CC 63-6 (Pharmaceuticals)

L32 ANSWER 55 OF 55 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1976:61395 HCAPLUS

DOCUMENT NUMBER: 84:61395

TITLE: Versatile water-solvent soluble polymer and coating composition

INVENTOR(S): Vasta, Joseph A.

PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA

SOURCE: Def. Publ. U. S. Pat. Off. T, 29 pp.

CODEN: USXXBN

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|--------------|
| ----- | ---- | ----- | ----- | |
| US 940005 | | 19751104 | US 1970-36480 | 1970 0511 |

AB Thermosetting coatings were prepared which can be reduced to a spray viscosity with water or other non-polluting solvents and which give durable, grease- and stain-resistant coatings with good adhesion to unprimed metal substrates. Thus, styrene 13.64, Me methacrylate 9.74, acrylic acid 0.97, vinylpyrrolidone 14.61, hydroxyethyl acrylate 9.74 and di-tert-butyl peroxide 0.97 part was added to a refluxing mixture of 40.5 parts ethylene glycol monobutyl ether (I) and 3.9 parts iso-PrOH over 4 hr, cold, and 2.60 parts morpholine and 3.33 parts I added. The resulting copolymer [34363-66-1] solution had 51.75% solids content. A mill base was prepared from the above polymer solution 8.02, TiO₂ 26.05, I 1.20 and iso-PrOH 4.81 parts. A stable coating composition was prepared from the above mill base 40, the above polymer solution 36.18, methylolated melamine-formaldehyde polymer 8.27, morpholine 1.74, and iso-PrOH 13.81 parts. The coating was diluted with water to spray viscosity, applied to unprimed and primed steel panels, and baked 30 min at 150° to give coatings with 2H pencil hardness and excellent appearance. The polymer solution was also used in electrophoretic coating.

IC C08G

INCL 260029400UA

CC 42-7 (Coatings, Inks, and Related Products)